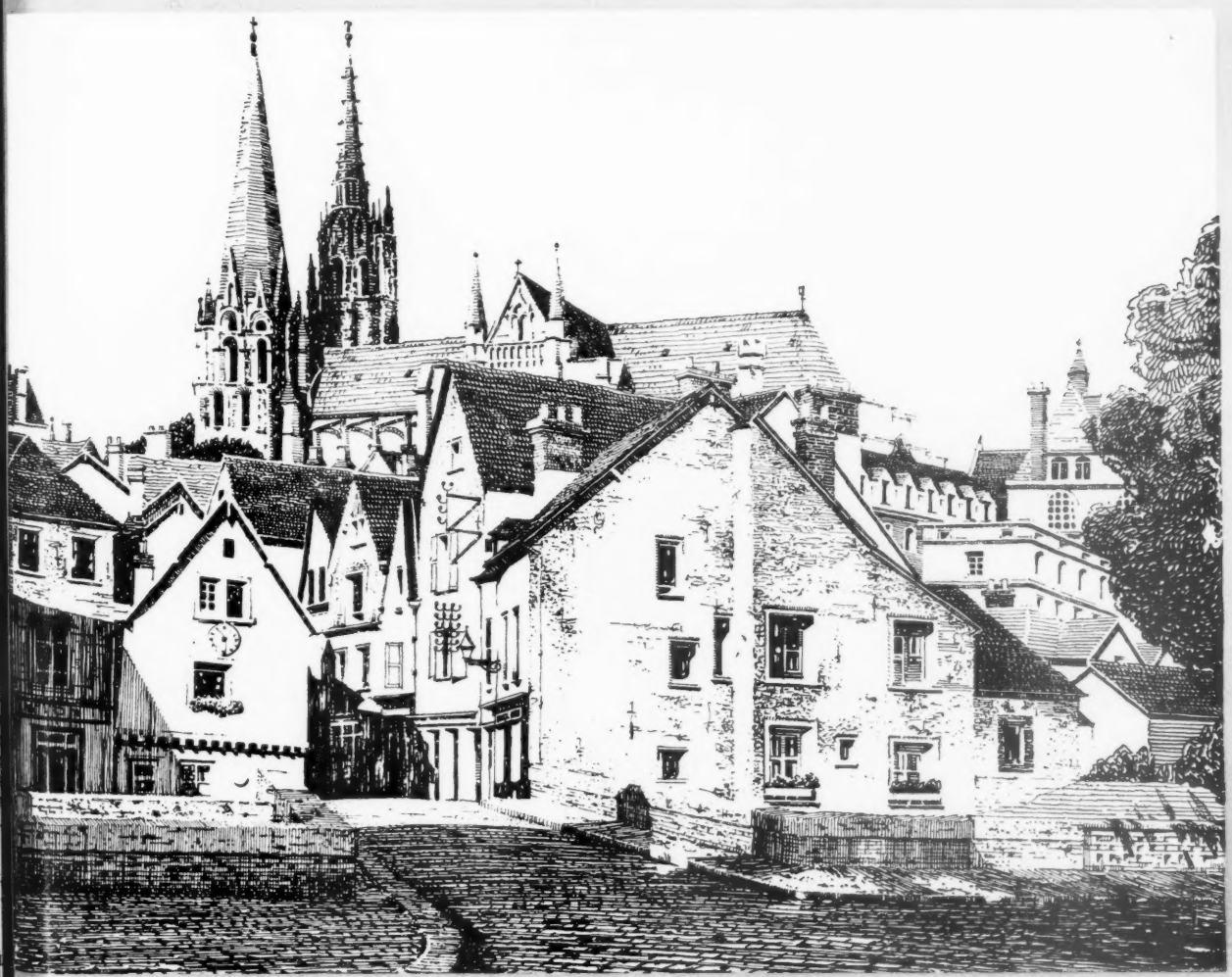
THIRD SERIES VOL 60 NUMBER 6 APRIL 1953

THE JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

66 PORTLAND PLACE LONDON W1 · TWO SHILLINGS AND SIXPENCE



Chartres Cathedral, from the Lower Town. From an ink drawing by Allan D. Coward [F]

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66 PORTLAND PLACE LONDON W1 TELEPHONE: LANGHAM 5721–7 TELEGRAMS: RIBAZO WESDO LONDON

APRIL 1953

The Princess Margaret, Honorary Fellow

H.R.H. The Princess Margaret has graciously consented to accept nomination as an Honorary Fellow of the Royal Institute.

Presentation of the Royal Gold Medal to Le Corbusier

As was expected, all available space including standing room was occupied when the President presented the Royal Gold Medal on behalf of the Queen to Le Corbusier. So famous an architect cannot fail to draw an audience, but this was a very special occasion—the conferring on an architect of the highest award which the profession in Great Britain can bestow. The proceedings and speeches are reported in this JOURNAL, but the report cannot reproduce the atmosphere of the meeting, nor the volume of applause which greeted the entry of the platform party—the audience standing—nor that which followed the speeches and the actual ceremony of presentation.

After the meeting Le Corbusier, the speakers and the escorting past Royal Gold Medallists were entertained at dinner by the President and Mrs. Robertson and members of the Council.

The Mock Arbitration

That the audience filled both the Henry Jarvis Hall and the foyer and remained for nearly three hours was evidence enough that the mock arbitration, held at the R.I.B.A. on 27 March, was a success. The 'plot' was handled in a very skilful and entertaining manner by a cast, every member of which was so good that it would be invidious to single out individuals. Nevertheless, the Royal Institute's special thanks are due to the 'guest artistes', Mr. J. Fox-Andrews, Barrister-at-Law, Mr. P. Macnair, Barrister-at-Law, and Mr. Harold Dexter, Contractor, and should be acknowledged.

The plot of the arbitration contained some awful warnings to architects and builders of what can go wrong in these days that are more highly geared to efficiency than were those of our fathers. A vague additional clause had been written into the R.I.B.A. Form of Contract and this formed a major item of disagreement. But the real trouble arose from the fact that neither the architect nor the builder—both estimable persons—had driven the job along as they should have done. Careless administration incurs penalties just as much as does wilful misbehaviour.

For the benefit of members who were unable to attend we publish on pages 227–232 of this JOURNAL a fairly full report of the proceedings. Unfortunately there is not space for a full report. While a condensed report is factual, it cannot reproduce more than sketchily the battle of conflicting evidence, nor the flashes of humour which from time to time sent rippling chuckles through the attentive audience. We have also had to condense the subsequent discussion which was still in full spate at closing time.

The British Architects' Conference

The last day for receiving applications for membership of the Conference is 16 May. As members already know, the subject this year is 'Schools'. A new feature will be the circulation beforehand to members of the five papers to be delivered so that the authors will merely have to introduce them briefly, thus leaving plenty of time for discussion. Another new feature is a discussion on Friday 12 June which the technical press have undertaken not to report. It was felt that this would permit more free expressions of views than would be the case if members felt that these might appear in print. A summary of this discussion, without the names of speakers being mentioned, will be circulated afterwards to the press.

The South-Eastern Society of Architects, whose jubilee is being celebrated at the conference, have arranged an attractive programme of tours to cover schools, housing and the many beautiful old buildings in which the area of the society abounds. A shuttle service of coaches will transport members between Folkestone and Canterbury.

Exhibitions will include one of cathedral models which are not normally on view, at Canterbury, and two of S.E.S.A. members' work and of schools, both of which will be shown in the Leas Cliff Hall at Folkestone. The Simon Langton Girls' School at Canterbury, in which the Conference Dinner is to be held, is a post-war school designed and built before the present cost restrictions were in force. The architect was Mr. L. Hugh Wilson, O.B.E. [*A*], City Architect, Canterbury.

Westminster Abbey. A Royal Peculiar

Under the title *A Royal Peculiar* the Dean and Chapter of Westminster Abbey have published a booklet setting out the facts about the present finances of the Abbey and making an appeal for funds. A leaflet on the appeal is enclosed in this JOURNAL and the Council specially wish to bring it to the attention of members.

The Abbey comes under the authority of no Archbishop or Bishop. The Sovereign herself is its 'Visitor'. It is a peculiar arrangement indeed: it embodies the very spirit of independence.

For a building which belongs to the British peoples and in which their kings and queens have been crowned during nine centuries and where many of them are entombed, containing also the grave of the Unknown Warrior and the memorial to 'the Few' who saved us—and the free world—in the Battle of Britain, it is rightly independent. But in these days of rising costs, independence has its perils. Repair of the fabric never stops and at the present time large sums of capital expenditure are needed for this. Maintenance of the services and music also takes a large sum of money annually. Last year the total expenditure was £68,000 and this year it will be more than £70,000. Against this the Abbey has an assured annual income of £37,200 and an average of £22,000 from fees, gifts and profits on guide books, etc. The target of the appeal is £1,000,000 to make the Abbey secure for the future.

For architects the Abbey as a building has a special interest. The loftiest medieval interior in England and one of the finest, it contains among other beauties that incredible late flowering of Gothic architecture, the Chapel of Henry VII. Many famous architects, including Wren and Lethaby, have been among its Surveyors to the Fabric. It is perhaps the key building of English architecture.

The International Union of Architects

The Third Joint Assembly and Congress of the I.U.A. is to be held in Lisbon from 21–27 September at the Palacio Foz. Arrangements are in the hands of a steering committee under the President of the Congress, Sr. Carlos Ramos of Portugal.

Mr. C. H. Aslin, C.B.E. [*F*], and Professor Gordon Stephenson [*F*] have accepted invitations to act respectively as chairman of the School Construction Working Group and rapporteur of the working group dealing with Town Planning. Mr. M. Hartland Thomas, O.B.E. [*F*], has accepted the invitation to act as rapporteur of the working group dealing with Modular Coordination.

At the first meeting of each working group the rapporteur will introduce the subject under study. Any member wishing to participate in the debate will have to give prior notice to the chairman, and to provide him after the meeting with a written résumé of his speech. The conclusions reached by working groups will be edited by editorial committees elected by the different groups, and will then be presented in plenary session for discussion and approval. A full account of the Congress will be printed and put on sale in 1954. One copy will be sent free to all members of the Congress.

The working languages for the Congress will be French, English, Spanish and Portuguese. For plenary sessions a system of simultaneous translations will be laid on. Each working group will itself decide in what language its work will be transacted.

M. Jean Tchumi, Professor of the Lausanne School of Architecture and President of the Swiss Section of the I.U.A., has been nominated to succeed the outgoing President of the I.U.A., Professor Sir Patrick Abercrombie [*F*], who is not eligible for re-election.

Translations of a report entitled 'The Role of the Architect with regard to Industrialisation of Building', prepared by the I.U.A. working group dealing with Mass Production in Building, can be obtained on application to the Secretary of the United Kingdom Committee, I.U.A., at the R.I.B.A.

Conference on Tropical Architecture

The success of the recent Conference on Tropical Architecture held at the Bartlett School of Architecture focuses attention on a field of architectural design which is becoming increasingly important. Because architects no longer seek for styles, this study is primarily one of function. The exclusion of solar heat and glare, designing for earthquake and hurricane resistance, planning to obtain through air currents and construction to deter termites are some of the main items. But the conference brought out the fact that there is more than one design technique to be considered; not only are there at least two kinds of tropical climate, the hot dry and the hot humid, but sociological habits have also to be studied. It seems likely that this subject will expand considerably in the next few years and is a fruitful field for research.

The speakers at the conference were mostly men with special experience of tropical building so that it became to a great extent a pooling of knowledge. Among the architect speakers were Professor Sir Patrick Abercrombie [*F*], Professor R. J. Gardner-Medwin [*F*], Professor Sir William Holford [*F*], Mr. Percy Johnson-Marshall [*A*], Mr. G. Anthony Atkinson [*A*], Mr. Fello Atkinson [*A*], Mr. Frank Rutter [*F*], Mr. A. M. Foyle [*A*] and Mr. Max Lock [*F*]. The chairman and representative of the R.I.B.A. was Mr. Alister MacDonald [*F*].

Recordings by Frank Lloyd Wright

Many architects have stated their beliefs in books and indeed the number of these tends to grow, but it has been left to that great innovator, Mr. Frank Lloyd Wright, to state his beliefs—or some of them—on gramophone records. The Frank Lloyd Wright Foundation have on sale three long-playing records at $5 each, plus postage, on two of which he has recorded a talk *Man or Machine* and an address to the Junior A.I.A.; the third record contains a talk on acoustics, F.L.W. improvising on the piano and reading fragments from Walt Whitman. Those admirers of Frank Lloyd Wright who wish to have his voice in their own homes and who can master the export of currency restrictions should write to The Frank Lloyd Wright Foundation, Taliesin West, Scottsdale, Arizona. The records are sent C.O.D.

Mr. J. L. Gleave, A.R.S.A.

Mr. J. L. Gleave [*F*] has been elected an Associate of the Royal Scottish Academy.

Forthcoming Exhibition of Architectural Photography

The Council have acceded to the request of the Royal Photographic Society, who are celebrating their centenary this year, to display an exhibition of architectural photographs at the R.I.B.A. in September next.

R.I.B.A. Golfing Society

The R.I.B.A. Golfing Society have produced their fixture list for 1953, and it contains an attractive programme of five matches and three meetings. The season has already opened, the next event being a match against the Liverpool Architects Golfing Society at Formby Golf Club on Saturday and Sunday 2 and 3 May. The annual week-end meeting is at the Royal Cinque Ports Golf Club, Deal, Kent, on Saturday and Sunday 27 and 28 June, and accommodation has been provisionally booked at the Royal Hotel, Deal, from the Friday night until the Monday morning.

The Hon. Secretary, Mr. Eric H. Firmin [*F*], tells us that the Society will still be glad to welcome new members. Those interested should get in touch with him at 10 Manchester Square, London, W.1 (WELbeck 2849).

R.I.B.A. Diary

SATURDAY 2 MAY 5 p.m. Exhibition of Mural Paintings closes.
TUESDAY 5 MAY 6 p.m. Annual General Meeting.
MONDAY 11 MAY 6 p.m. Library Group meeting. Identification of drawings by unknown architects or of unknown buildings.
SATURDAY 16 MAY. Last day for receiving applications to attend British Architects' Conference.
SATURDAY 23 MAY and MONDAY 25 MAY. R.I.B.A. offices and library closed for Whitsun holiday.
FRIDAY 29 MAY 9 p.m.–1 a.m. R.I.B.A. Annual Reception.
WEDNESDAY 10 JUNE–SATURDAY 13 JUNE. British Architects' Conference, Canterbury and Folkestone.

M. Le Corbusier with the President

Presentation of the Royal Gold Medal to Le Corbusier (Charles Edouard Jeanneret)

At the R.I.B.A., 31 March 1953, the President in the Chair.

The President: Before this evening begins, I think that you would like to stand for a moment in token of respect for Queen Mary.

The meeting stood in silence for a short time.

The President: On the recommendation of the Council of the Royal Institute of British Architects, Her Majesty the Queen has approved the award of the Royal Gold Medal for 1953 to Monsieur Le Corbusier, of France. I need hardly say what an enormous pleasure it is to have Monsieur Le Corbusier with us this evening. He has come from France today; he has been photographed a few times and he has made three broadcasts; but he is a man who takes punishment lightly, and he is standing up very well to his trials.

A number of people are going to speak about our guest tonight, and I am not going to say very much; I shall leave it to others. There are, however, two things which I should like to say about M. Le Corbusier. One is that his name is known and respected as an architect all over the world. To an extraordinary degree it is a household word. The other thing is that as an architect he has never been interested in what architects have to do to earn their living; he has earned his living, but he does not care about it. He would leave any job which did not interest him and refuse any work, however fat the fee, in order to do something which appealed to his artistic integrity. It is a tremendous thing for an architect to do that, and I think that it is about the highest compliment which I could pay him as a man.

We are going to hear more worthy speakers than myself, and I will ask M. Claude Lebel, who represents M. Massigli, the French Ambassador, who cannot be here this evening, to say a few words.

M. Claude Lebel: I must begin by telling you how extremely sorry the French Ambassador is not to be with you this evening. You will understand that the very sad event which happened last week has been responsible for that. I ought to add that he is particularly sorry not to be here to be present on this very great day in the life of M. Le Corbusier. May I add also that his regret will become yours, because there are very many things which he could say and which I do not feel that I am qualified to say.

I feel, for instance, that, knowing the history of the Royal Institute, he would very probably have told you how very wrong people are when they speak of the insularity of the English, because the number of Gold Medals which have been accorded to foreigners is very remarkable, and proves the interest which this country has and has always had in countries abroad and in what is happening there. After all, nowadays it may seem in a way normal that a country should honour the representatives of another country, but I wonder whether this was generally the case in 1849, the date on which, I understand, the first Gold Medal was given to a foreigner.

I suppose that M. Massigli would also, with his extremely great skill, have pointed out the remarkable eclectic properties which the Royal Institute has manifested in recommending the award of a certain number of Gold Medals. I have seen a list of the French architects who have received the Gold Medal. I have seen together the names of Garnier and Perret, who are both responsible for theatres, but extremely different ones. I also see the name of Viollet le Duc, and now the name of Le Corbusier. This is very remarkable indeed as showing the extent of the comprehension that can make an award to two architects, one who seemed to put the past into the present and one who seems to put the future into the present.

Let me say quite simply that, not having the general knowledge which my Ambassador possesses, the only thing which I can tell you is the immense pleasure that it is for me to be here today, first because a man whom I admire immensely is receiving a very remarkable honour, and secondly—and let me say this in conclusion—because I have always thought that of all the arts architecture stood first and foremost, and this is for me one opportunity to meet a number of architects. That is indeed a very considerable pleasure for which I thank you, Mr. President, but I also thank M. Le Corbusier, who gave me that opportunity.

Sir Herbert Read, D.S.O., M.C., Hon. Litt.D.: I shall be followed, as I have been preceded, by speakers who will pay a tribute with authority to Le Corbusier the architect. I shall beg leave to speak very briefly about Le Corbusier the poet. Yes, M. Le Corbusier is a poet, a great poet. I am told that he actually writes verses, though I regret that he does not publish them, or at least I have not seen them. We all know that he paints pictures, and that if he had not been so busy as an architect he might have taken his place among the leading painters of our epoch. There is a close stylistic relationship between the paintings and the architecture; they are alternative expressions of the same spiritual harmony.

M. Le Corbusier also writes books—vigorous, vital books in a prose that sparkles with metaphors and images, with aphorisms and with crystal-clear logic. All this constitutes a complex activity which can only be called poetic, an imaginative process which is unique in our time and which exerts an influence far beyond the spheres of architecture and town planning. Le Corbusier is a man with a poetic vision of life, not a poetic vision of buildings and cities only but rather a vision of a poetic way of life, a new manner of living. Life in that vision is above all radiant, not only *La Ville Radieuse* but

M. Le Corbusier between two former Royal Gold Medallists: Mr. Edward Maufe, R.A. [*F*] (1944) and Dr. Charles Holden, M.T.P.I. [*F*] (1936)

also *la vie radieuse*. He has said in one of his books, and it is the key to all his activities, that the concept of life itself must be changed, and indeed that we should begin by investigating the nature of happiness. That is the first necessity; the rest, including a new architecture, will inevitably follow.

'What should we build with?' he asks, and he dares to answer 'Not with steel and cement, but with love.' Steel and cement, all the modern techniques, are given to us for this purpose, to express our love of life and of man. They are the raw materials of a visual love poetry. The techniques are the foundations of lyricism, of poetry. Revolutionary? He admits it, he glories in the fact, but at the same time he explains that he is a revolutionary who has never had but one master, the past. He has ranged through the world in his studies of the past. He is probably the most travelled, the most international architect since the Middle Ages. He has learned from that experience that it has always been the poet who has shown the new way and revealed the new truth.

In *When the Cathedrals were White*—and only a poet could have thought of such an evocative phrase—M. Le Corbusier has pointed out that the whole universe was raised up by an immense faith in the energy, the future, the harmonious creation of a civilisation. Le Corbusier has that immense faith. He is not just any kind of poet; he is an immensely optimistic poet. He believes that the present is creative, creating with an unheard-of intensity. He believes that a great epoch has begun, a new epoch. To that great epoch he himself has contributed the paradigms, the prototypes. That is why we honour him today as the poet who has given us a new vision of the future, and not only a vision but the beginnings—white, limpid, clean, clear and without hesitations, a new world opening up like a flower among the ruins—his own poetic words, again apt to describe his own poetic creations. Mr. President, Ladies and Gentlemen, we honour a great poet.

Mr. Robert Matthew, C.B.E. [*A*]: I have been asked to say something tonight in particular about M. Le Corbusier and town planning. Let me say at once that this is, of course, to say something almost about his whole life and work. I do not imagine that in his mind there are two compartments, one for architecture and the other for town planning. If one could characterise his approach it would certainly be one of wholeness, an indivisibility, the subtle but enormously important relationship of the part—in the case of town planning, of the innumerable parts—to the whole.

It is no accident, I imagine, that Corbusier the *urbaniste* and Corbusier the inventor of the *modulor* are one and the same. The relentless search for order, the search for proportion and the discovery of its roots in the classical golden ratios is the inevitable expression, to my mind, not only of his disgust at the pathetic disorder of our 19th and 20th century towns, but also of his persistent belief—and this must be tremendously to his credit, in view of his own experience—in the possibility, if not the certainty, of the emergence of harmony in human affairs.

For far too long Corbusier's town planning schemes, fertile, audacious—I would say revolutionary, but, with great respect to Sir Herbert Read and the EVENING STANDARD, I do not know whether Corbusier would entirely accept that phrase today—for far too long these remained on paper, in the realm of theory. A window on new worlds, in the organisation of urban space, had been opened, and in the years between the wars the whole world—in so far as it was young, progressive and architectural—was drawn to his atelier in Paris.

What they saw there—and they could see this nowhere else in the world—was nothing less than a new affirmation of the rights of man, the rights of man in terms of sun, light, space, quiet, trees and grass. The translation of this book of rights into architectural terms has, I imagine, been his constant work and recreation. The wonder is that, with so little opportunity before the war to put into practice his theory, a consistent development was possible at all. That this was so, however, is now a matter of history, as anyone comparing his early studies for *La Ville Radieuse* with, for instance, his post-war reconstruction schemes can immediately appreciate.

Today the situation is different, quite different. M. Le Corbusier is here, there and everywhere, advising, designing, creating, from India to New York and from South America to Marseilles. His life-long studies in the functions of the city are now put to the test of practical achievement, and everyone here will wish him well in his great work for the present and for the future. These studies, knitting together the technological possibilities of building with radical solutions to, among other things, the seemingly intractable problems of traffic circulation, have for long now been recognised as a fundamental contribution to 20th-century town planning technique. Even some of the world's largest bureaucracies have not been entirely impervious to these ideas.

Bureaucracies and academies! These have been the substantial windmills at which this Don Quixote, this wandering knight—and here, with great respect, I have used his own words—has unremittingly tilted. Academies, for their fine words and fair gestures, masking a basic lack of understanding of 'cities in evolution'. Bureaucracies, for their power-driven politics, obscuring and confusing where there should be directness and simplicity. This, indeed, is his characteristic; his approach is nothing if not direct, alike to his problems and to his critics.

His notebooks are a miracle of direct statement. I know of no one who has depicted the urban scene with equal economy of line and certainty of effort. In these thousands of sketches lies the development of his thought from the rigid geometry of the university-quarter-caravanserai of the early 1920s and the *Voisin* plan for Paris to the highly imaginative plan for St. Dié in 1945, with its disciplined informality and differentiated traffic levels, and still more in the new capital of the Punjab, which has already, before it is built, become one of the most celebrated cities in the world.

The description by M. Le Corbusier of the plans for this city of Chandigarh given at the C.I.A.M. meeting in England in 1951 is, I think, an excellent example of his brevity of statement and his clarity of aim. Describing the various functions of the city plan, he comes after a number of other headings to the heading 'industry', and he makes but one terse comment: 'This is not an industrial city!' Let bureaucracies take a lesson from this brief but adequate statement!

I must confess, however, that all his statements are not equally illuminating. In English, at any rate, I find some of his books difficult to follow. His prose is explosive, telegraphic, sometimes highly enigmatic. This may well account for the

criticism, which has long been current here in the past, that Le Corbusier is a town planner who is out of touch with everyday life as we in this country know it. Those who feel this, however, need only turn again to his drawings and illustrations. These are the real expression of his comprehension of the human problem in all its variety and contradiction. His earliest book in English, *Towards a New Architecture*, starts with a picture of the great Bell telephone building in New York, but it finishes with a picture of a briar pipe. The constant theme of his urban sketches is the re-establishment of nature. The distance covered by an hour's walking, he has said, is a surer measure than abstract numerical scales—and I believe that he practises, in this respect at any rate, what he preaches.

To M. Le Corbusier, town planning must be the spontaneous expression of human needs. Legalistic complications are only there to be surmounted or swept aside. The law of the land, he says, is that it shall support houses, and not that it shall support the unmerited ascension of private fortunes. Nor does he readily acknowledge limitations. 'Compensation'—the great bogey of all town planners everywhere—'can be seen,' he says, 'in a new light if it is taken to mean the creation of fresh and splendid conditions of life for the townsman. That would indeed be compensation.' How true this is! It is, in fact, no more than the other side of the planning ledger, but how often it is ignored, though not by M. Le Corbusier! To him, first things are first, and these are human values.

The conclusion to his 1951 C.I.A.M. contribution is in these words: 'I have tried to show that *life* forges the tools.' In these days of great tyrannies, it is our privilege in our own sphere of architecture and town planning to recognise this life force through the incorrigible individuality of M. Le Corbusier, and in doing honour to him, as we do tonight, we do some small thing to cherish the vital flame.

Mr. W. W. Wells-Coates, O.B.E., Ph.D., *[F]*: It is a very great privilege to be here today to speak in honour of M. Le Corbusier, the master whose disciple I have been for many years. Corbusier, with Gropius and others, founded the International Congresses for Modern Architecture, the C.I.A.M., which have developed and represented to architects and allied technicians, and indeed to the world, new concepts in architecture and town planning for the past 25 years.

As a representative of C.I.A.M. in this country, through the MARS Group, which is celebrating its 21st birthday this year, I have received from leading C.I.A.M. members in other countries a number of messages of congratulation on this occasion, and I should like to quote a few of these. From Delgo, Ernesto Rogers and Peresutti, our friends in Milan, we have this message: 'Very pleased R.I.B.A. giving great reward to Corbusier. We take part most heartily in the honour of sending our congratulations and best wishes.' From Richard Neutra, of California, comes the message: 'Corbusier has added a stupendous impetus to modern design and to modern thought.' From Dr. Giedion, the Secretary-General of C.I.A.M., in Zürich, we have a message which ends with the words: 'Corbusier is more brilliant than ever today.' Walter Gropius says: 'His abundance and the fertility of his genius determines Corbusier's place in history as that of the Leonardo of our time.' Lastly, from Sert, who is Gropius's successor at Harvard and President of C.I.A.M., we have a message saying: 'In the name of C.I.A.M. and also my own, please convey to the R.I.B.A. heartiest congratulations for setting example to all other architectural societies by granting Gold Medal to the most outstanding architect of our time.'

Le Corbusier is known to us as a poet, a painter, a philosopher, a master architect and an outstanding leader of men. He is also a gay and inspiring companion and friend. But above all I would name him an inventor, an innovator, a discoverer, the initiator of a new world of forms. Corbusier is the architect's architect. He is the prophet of new developments, the sure master of form, the prolific delineator of new terms and new themes in this transitional age for architecture. He has done more to consolidate our thoughts and inspire our actions than any other living man.

In spite of singularly fierce opposition from persons and personalities, including often many amongst his own profession, and from committees and authorities, both national and international, Corbusier has throughout his life been the most resolute fighter for form and reform in life. He has pointed sure ways to the future of architecture. He has influenced through his teachings and his example to architects throughout the world ten thousand times the number of clients they might otherwise have had.

This is no ordinary occasion. The Royal Gold Medal of the R.I.B.A. is not being presented to an ordinary man; it is a great man who honours the honour bestowed upon him today.

The President: We are now to have the pleasure of hearing from a student of architecture, Mr. Colin Glennie, a student at the Architectural Association School.

Mr. Colin Glennie: In his book *The Condition of Man* Lewis Mumford wrote: 'This is one of those periods when only the dreamers are practical men.' By the same token, the so-called practical men have become the makers and perpetuators of nightmares, for it is their attempt to crawl back into the crumbled wreckage of the immediate past which has doomed our society to frustration, to sterility, to savage barbarism.

Le Corbusier is a dreamer. He is also one of the only truly practical men of our age. He understands the spirit of the 20th century. It is not for him something from which to run away or something to be passively accepted with a shrug or a sigh. He has faced the problems that the vast changes which make our times so different from even those of 50 years ago have brought about. He has tackled them with courage, and he has gone far in solving many of them. For him everything is vital, and above all mankind is real, not a vague 'they' huddled hopelessly between inverted commas, who must be forced into accepting a special new style of architecture, trumped up to please the aesthetic sense of some artistic set, but a collection of men, women and children, each with their needs, each with their hopes, to whom must be given the opportunity of living—sun, space, verdure; not Doric, Ionic, Corinthian, nor flat roofs, corner windows, random rubble. The styles are alive, he has said, and he has proved it.

It is only in this light, I believe, that we can really understand him. It is no use climbing our ivory towers and talking about humanising the modern movement. In those terms modern architecture means nothing. It is the very humanness of the movement which Le Corbusier played so great a part in initiating and the impetus of which he has done so much to sustain, which makes it so wonderfully worth while, and to attempt to stylise and play tricks with it so futile. His life has been devoted to the creation of beauty and essential rightness, which is the true work of the artist and the highest form of human endeavour. Indeed, it is vital if life is to mean anything more than a full belly and a reserve in the bank.

Much of his time has been given to the problems of our way of life in our cities, and how our cities themselves can live. The basis of this work has not been stylistic whims nor lush romanticism, but a deep and genuine regard for man and for the family as the true organic unit, whose needs must be answered and whose spirit revived. The 20 years of research which have led to the building of the Unité d'Habitation at Marseilles were, in his own words, the consecration of an artist's life.

Le Corbusier is a great architect. As purely abstract works of art his buildings are of the highest order, but that, as I have tried to say, is very far from the whole truth. To stop there is to fail really to understand him or his work. Le Corbusier is a great architect, a great artist, a great man in the fullest possible sense of that word. As architect, as painter and as a writer he has shown that man need no longer be weighed down by his own inventions and contraptions. He has helped more than any other man to give order and beauty to what must be one of the most stimulating periods in which man has ever lived.

Let us not believe that by presenting him with our Royal Gold Medal tonight we have done our bit, recognised his work, and are now free to pass by on the other side. Too many people are content to dismiss the hopes and aspirations of the young as useless idealism which should be got over as soon as possible, and which will, anyway, be knocked out of them by

the hard world. Le Corbusier has often said that he is still a student, and to me at any rate he will never be anything but young; but above all else he is an idealist. Not even an often positively hostile world has been able to daunt or defeat him. What he has had the happy courage to do almost alone we can certainly do together, so that with the Royal Gold Medal will go, I hope, a new understanding of the true spirit of greatness embodied in Le Corbusier's work and a renewed effort to emulate that spirit, so that beauty and qualities which I can only describe as humanity may return to architecture, where now there is almost nothing but ugliness, stupidity and chaos, for I am sure that it is this which is nearest to his heart.

The President: Monsieur Le Corbusier must be feeling that he is never going to get his medal! But now the moment has come, and I will ask two Royal Gold Medallists, Mr. Edward Maufe and Dr. Charles Holden, kindly to conduct him to the platform to receive the Medal.

The President then invested Monsieur Le Corbusier with the Royal Gold Medal.

Monsieur Le Corbusier, speaking in French, said: Thank you. I offer my thanks to Her Majesty the Queen, who has been good enough to honour me in a way which moves me deeply and of which I am deeply appreciative. I do not know whether I ought to speak to you in French or in English.

The President: Whichever you like—both, if you prefer it!

Monsieur Le Corbusier: Then I will speak in French. I have listened with interest to the speeches which have been made, and I am conscious of the kindness shown to me in doing me this great honour. I wish to admit, what I think that you have recognised, that it is always the human being, man, that I have sought to study, not as a professional architect but as a discoverer, and also as a traditionalist. I have always had my feet in the past, and my head in the past too. My roots are in the past, though not in the Dark Ages of the academies. At the same time, I have tried to take a step towards the future. It has been my object always to be simple and direct, to be both an engineer and a poet.

After all these flowers which have been showered on me, I should like to try to show you another aspect of Le Corbusier, Le Corbusier as a cab-horse. If tonight I am wearing this magnificent medal, it is because I was a cab-horse for more than forty years. During all that time I worked for all the days that God made, and often in the evenings as well, with one aim in view, to follow the truth and let my conscience be the judge of whether my work was good.

Before you presented me with all these bouquets I received, like a true cab-horse, many blows with a whip, but this did not alter my outlook or change my aims. I should like to tell you something about what happened to me, because it will perhaps show you at what a price one can perhaps succeed in making something of one's life. In all my life of more than sixty years I have never had commissions from the State and only had one official client, and that was for the Unité d'Habitation at Marseilles. I was asked 'Will you make a great building for these people?' and I replied 'Yes, on one condition, that I am not to be bound by any rules.' They agreed, and so I started work on this building, which embodies a great many of my proposals for the modern town, the town of today. I was governed by the cosmic laws of space, by my respect and admiration for nature, by the needs of the family and the recognition of the home as the fundamental unit of society and the hearth as the centre of the home. My work there has its roots in the past, in the Grande Chartreuse, which for fifty years has appealed to me by its harmony and its perfect association of the individual and the collective.

That is the positive part of what I have done. I have created something at Marseilles, as I realised when on 14 October last, at 9 o'clock in the morning, I saw it completed and inhabited. There was general agreement that it was magnificent, and I was the first to say so. I always had confidence that it would prove to be so, in spite of all the attacks that were made upon it, and on 14 October of last year I realised that here was a new achievement not of an architect but of the constructive spirit of our time.

Now let me tell you something which will show you that I am, after all, modest. I began in 1923, when I built a village at Pessac. For eight years this village remained uninhabited, because for eight years it was refused a water supply, until in the end the Government had to intervene. In 1925 I built the pavilion *L'Esprit Nouveau* at the Exhibition of Decorative Arts in Paris. It was the most hidden-away building in the whole exhibition, and came upon you, as you went round the exhibition, as a sudden apparition, as something wholly unexpected. The international jury wanted to give me a diploma of honour, but one of the best architects in France, himself a medallist, protested; he said 'Whatever it may be, it is not architecture.' The battle, you see, was already joined.

Then there was the competition for the new League of Nations building in Geneva. Twelve kilometres of plans were submitted, and I sent in about a hundred metres. That was not accepted, for reasons which I thought were little short of abominable. That was followed by plans for the Centrosoyus building in Moscow, which were first of all accepted, but then they wanted a balcony on the façade, and in the end my proposals were dropped. I was asked to prepare plans for the Palace of the Soviets, and these were first of all accepted and then declined.

In 1935 I decided to go to America for a change of atmosphere, and there I found—you may not believe it, but it is true—Americans who were suffering at that time from an inferiority complex. A model of my design for the Palace of the Soviets was exhibited—of all places!—at the Rockefeller Foundation in New York, where it aroused the admiration of young Americans. That model, two metres long, is in the museum of the Rockefeller Foundation. Another project on which I worked at that time was refused on the dual plea that it was revolutionary and out of date.

With some Brazilian architect friends I worked on plans for a Ministry building in Rio de Janeiro. That building was actually put up during the war. I found out that it had been through seeing an illustration of it in an English magazine.

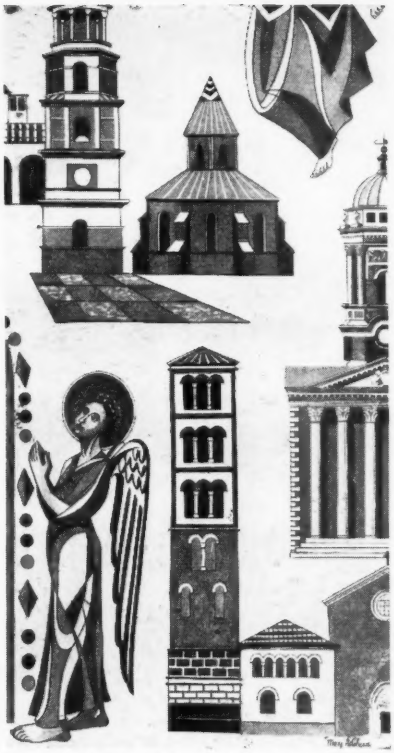
Then came the reconstruction of France after the occupation. Everybody seemed to be working on this, and the Minister who was responsible said to me, 'What are you reconstructing?' I replied 'Nothing, Mr. Minister.' He said 'Well, you built a town once. Why not reconstruct that?' He made inquiries from his staff, and they told him that all the work had been allotted to somebody or other, so he said 'Well, there is always La Rochelle. It is not destroyed at present, because the Germans are still there, but the Allied Armies are closing in, and in a fortnight it will be destroyed, and then you can rebuild it.' Happily, however, it was not destroyed, and so I did not have to rebuild it.

I ought also to mention the town plan for Algiers. Over a period of years I made a number of plans without any fee for a new town, and people said 'If it could come true it would be marvellous', but it did not come true. Algiers was the last of such plans. I made a plan for Barcelona which was accepted by everybody, but then the revolution came. I made a plan for Stockholm, but they said that they recognised the hand of the author, and it was put on one side. There was a plan for the left bank of Antwerp in 1933. In 1938 I did a plan for Buenos Aires, but seven years later one of the Ministers said 'If we bring in Corbusier, it will seem to show that we can't do it ourselves.' A plan for Bogota was accepted, but then there was a political revolution.

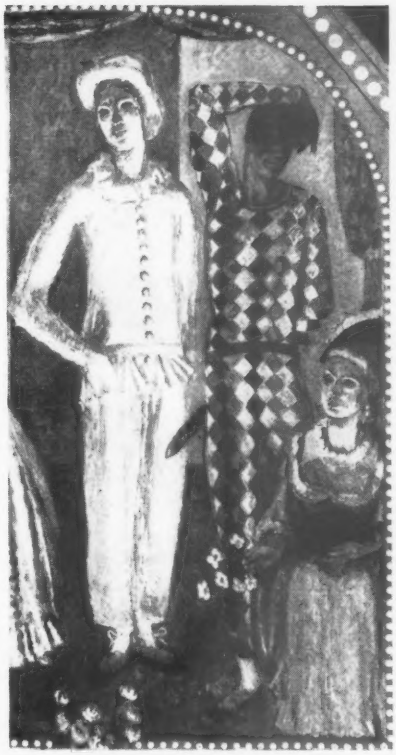
All that represents the work of a cab-horse. It meant a vast amount of work by head and hand and collaboration with large numbers of people. My plan for La Rochelle, which was a good plan, was silently put aside. At St.-Dié, which I was asked to rebuild, people said 'Are you going to make us live in huge barracks?' and everybody, from the bourgeoisie to the workers, rejected the idea. The other two great disappointments I have had are over that big building for the United Nations in New York (which cost about the same as my whole town of Chandigarh) and the Unesco building in Paris. That shows you a little of the nature of the work which I have accomplished during my career.

I should like to say once again how much I appreciate this Medal which I have received from Her Majesty the Queen, and I thank you once more.

Detail for Venetian glass mosaic, reception hall, European Airways terminal, by Laurence Scarfe. Architect: Arthur C. Braven [*A*]



Part of scheme by Mary Adshead for memorial painting to Professor Adshead. Oil and wax



Suggested decoration by Vanessa Bell over proscenium arch, Tower Theatre, Islington. Oil

Exhibition of Mural Paintings at R.I.B.A.

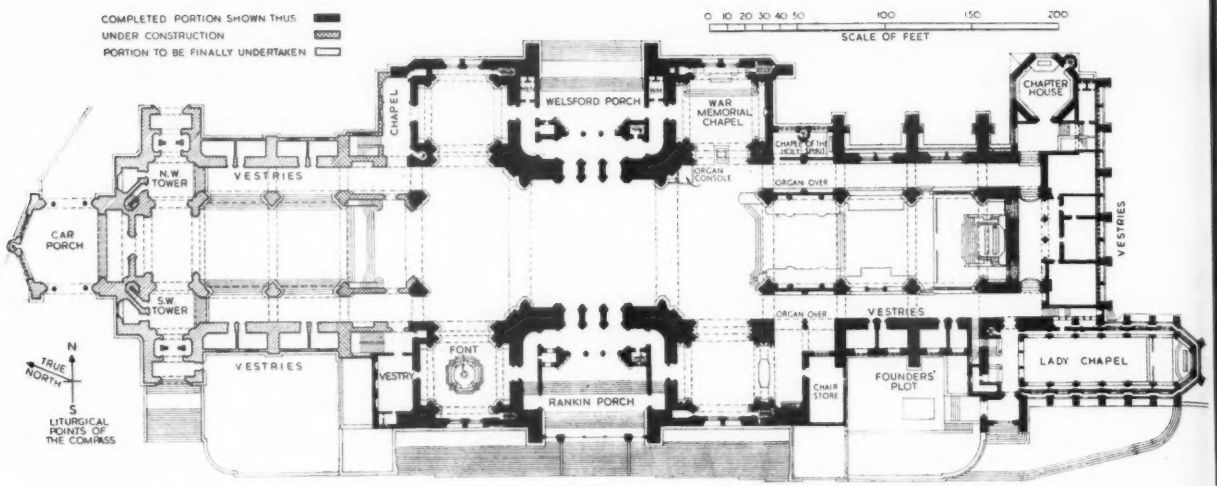
THE EXHIBITION arranged by the Society of Mural Painters was formally opened by Lord Methuen, M.A., A.R.A., A.R.W.S., F.S.A. [*Hon. A*], on 9 April, the President, Mr. Howard Robertson, M.C., A.R.A., S.A.D.G., being in the chair. Lord Methuen said he had once aroused opposition by saying that painting was primarily a decorative art and that easel painting was a somewhat artificial one. He had since become more fortified in that opinion.

With the change in patronage that had taken place in recent years there had been a decay in the art of mural painting. This was to be regretted because functionalism unassisted would not provide its own decoration. The object of the exhibition was to give architects some idea how the mural painter and architect could work together. All the works shown were designed in association with an architect or designed for an actual building. He hoped that architects would influence the new patrons, mostly local authorities, to see the value of mural paintings.

It was sometimes asked how mural paintings would withstand our climate. They would do so provided the background started dry and remained dry. The paintings of Verrio at Hampton Court showed that mural paintings could withstand our climate.

Suggested decoration by Duncan Grant for proscenium arch, Sadler's Wells Theatre. Oil

Mosaic, 'The Storyteller', by Dorothy Annan. Architect: Stephen Gardiner [*A*]



Fifty Years of Building Liverpool Cathedral

An interview with Sir Giles Gilbert Scott, O.M., Hon. D.C.L. (Oxon.), Hon. LL.D. (L'pool), R.A., Royal Gold Medallist, Past President R.I.B.A., Honorary Corresponding Member of the American Institute of Architects

Note by the Editor

Fifty years ago next month the design by Mr. Giles Gilbert Scott was placed first in the two-stage competition for the new Anglican cathedral in Liverpool. Work was begun in the same year and since then the cathedral has grown year by year without interruption until today it is nearly completed. We felt this to be a suitable occasion on which to interview the cathedral architect and to publish his views and experiences.

When the result of the competition was announced the cathedral building committee thought it unwise to entrust so large a project to an architect then 22 years of age. So they associated G. F. Bodley, R.A., one of the assessors in the competition, with Mr. Scott. Bodley died in 1907 when the first portion of the cathedral, the Lady Chapel, was under construction. The committee then appointed Mr. Scott as sole architect.

Editor: I am asking you, Sir Giles, to cast your mind back to 1903.

Sir Giles: That is going back some time!

Editor: What does it feel like to have a building under construction for half a century?

Sir Giles: One might ask 'What does it feel like not to have a building going on for so long a time?' It is a difficult question to answer.

Editor: Most architects know that you have made changes from your original competition design as the cathedral has been built. Will you say what the principal ones were?

Sir Giles: The most important one, of course, is the substitution in 1910 of a central tower for twin towers. The chapter house was also reduced in size because it was felt to be too big for what was wanted, but that was nothing to do with me. The provision of a central tower in place of twin towers meant a drastic change from the competition design, and was made when Mr. G. F. Bodley died and I was entrusted with carrying on the work alone. The association of Mr. Bodley and myself had led to a number of smaller changes in the competition design which gradually changed its character and led to a design which was neither Bodley's nor mine. Bodley kept on altering a bit here and a bit there, until I was very dissatisfied with the result, nor was I content with my original competition design. As soon as I was given sole control of the work I decided to start all over again, to abolish the twin towers and have a central dominating feature; but, as the foundations and some of the column bases of the original plan had been put in, it was necessary to fit the new plan to the old column bases. The space at the crossing, between where the twin towers were to have been, was not large enough on plan for a tower of the size which I required, and so a large tower was planned farther west, with another set of transepts to balance the composition. This had the advantage of providing a large central space, which was lacking in the original competition design.

Editor: So the balanced plan—symmetrical about both axes—is to some extent an accident?

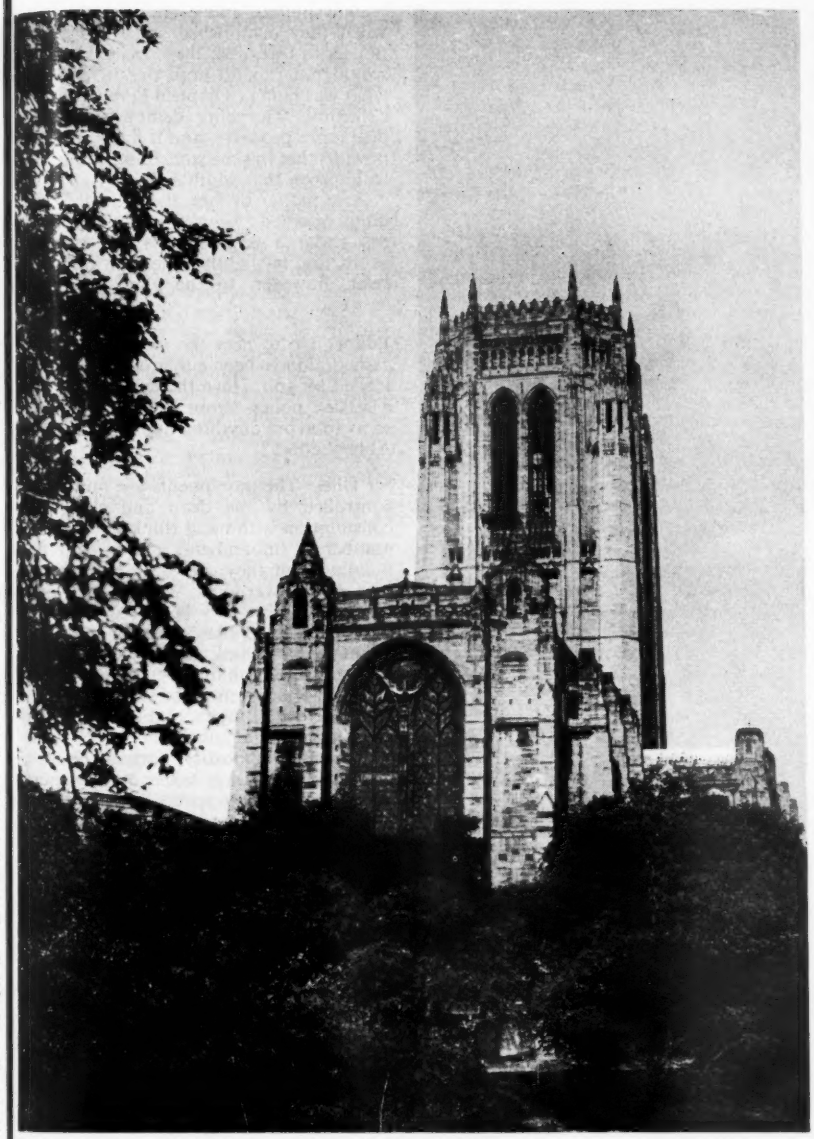
Sir Giles: You mean, with the tower coming in the middle? I think that that was so. While, as I say, the alteration had the advantage of providing a large central space, it led to vaulting difficulties where the narrower choir joined the wider central space, and these difficulties were increased by the fact that the bases of the columns of the junction were already in, and the vaulting had to spring from columns designed for a totally different purpose. This accounts for the curious way in which the vaulting ribs spring from the column mouldings at the entrance to the choir. In a way, it is rather like what might be expected with an old cathedral which has been altered and added to over the centuries and where the later work has been joined up to the old.

The inside treatment of the transepts with the side galleries was also a result of the change in plan, as here again the bases of the columns were in and had been designed to take the thick walls of the twin towers. When the towers were abandoned the walls were thinned and the galleries formed. As we already had the bases in, I threw arches over and made galleries, and did not carry the responds up any higher. It made an interesting effect, which was not really intended when the column bases were put in.

Editor: I have read in THE BUILDER of that time that there was some slight feeling about your pulling something down which had already been built.

Sir Giles: We did not pull down very much. We did abandon the foundations of the old chapter house, which were in and quite deep, and when that was altered we had to waste that work, but that was more because the committee wanted a smaller chapter house, and it seemed to work out better on the plan in that way.

Editor: In what other ways did the provision of a single tower affect the plan?



The tower and east end. From a photograph taken in 1951

The Queen, then the Princess Elizabeth, talking to one of the masons

Sir Giles: The site chosen for the large central tower brought it nearer to the west front than to the east front, and so the west front was extended outwards as far as the site allowed. There is a ravine across the west end which prevented us going any farther. That did result, however, in giving me just enough space to get the same length of nave as I had for the choir. This was really due to the alteration in the location of the central tower. The ravine or chasm at the west front provided a romantic setting for the front, but necessitated a side approach to the west entrances, unless I bridged the ravine, which would have spoilt the effect. I could not approach the west front on the axis, and had to approach it from the side, where there is a road. The main entrances were therefore, unlike mediaeval cathedrals, placed in the centre of the cathedral instead of at the west end, and the whole plan took on the characteristics of a classical plan symmetrical about both axes, but it just happened to come about in that way; as this alteration was worked out, so I found myself with that arrangement. I did not start with the idea of getting a central cross axis; it just happened.

It has always astonished me that the committee allowed a young man in his twenties completely to alter a design chosen in a competition by two eminent assessors. It was such a complete and drastic change from the old design that it has always amazed me that the committee had the good sense to give me so much freedom; they might well have said, 'We cannot allow such a drastic change as this.'

Editor: Perhaps we can discuss the clients a little later. The structural form, with aisles pierced through buttresses which reach to the main vault and thus avoid the need for flying buttresses and abolish the clerestory, is unusual in buildings of Gothic form. What led you to adopt this, and what are its advantages?

Sir Giles: The idea was to hide the aisle windows when looking down the centre of the cathedral, the intention being to get light without the eye being distracted by a large number of subsidiary bright areas. I wanted to concentrate attention on the focal points. I am always anxious in my churches to have concealed lighting by windows, because to see a number of windows is distracting; it distracts one's attention from a climax or focal point. Those walls are really put in to screen the view of the aisle windows.

The artificial lighting is on the same lines; I have tried to keep it out of sight, but that is very difficult in a building of such a height. In the large central space it is not possible to have indirect lighting. I have used direct lighting, but put it up very high, so that it will not be in people's eyes when they look normally along the floor. It comes down on their heads rather than into their eyes. The choir is lit by hidden lights behind the piers which shine their light on to the reredos. That is very trying for the clergy, who get the glare in their eyes when they face the congregation, but it is certainly effective when you have regard to the view from the central space.

Editor: You redesigned the building in 1910. Did you redesign later sections as they came to be built? In other words, has your experience in building churches had much influence on the later stages of the cathedral?

Sir Giles: Although I did not alter the main

The view towards the sanctuary from the western end of the central space under the tower

lines as the work proceeded, I detailed the work as it went on and as the builder required working drawings. My command of my medium undoubtedly improved as time went on, especially with respect to mouldings and modelling of surfaces. I obtained, in fact, a greater command of the third dimension. As one obtains more experience and gets older one acquires more mastery of the third dimension, and I found that I improved enormously in my sense of modelling. In Gothic you have to learn a great deal about modelling, because the mouldings and the modelling of the carved portions and the way in which the carving fits in with the mouldings is all very largely a question of modelling.

Editor: Are the designs for the nave and other final works complete? What is the general position so far as the completion of the nave is concerned?

Sir Giles: Full detailed drawings are complete except for some full-size drawings for the upper part of the west front. All the half-inch and most of the full-size drawings are done.

Editor: Is completion in sight?

Sir Giles: No. We have always built as the money has been available and as the committee have seen their way to complete the section we start on. At present the cost of building has gone up so much that we are engaged only on one bay of the nave. There are three such bays. That is as far as there seems to be any prospect of our being able to pay for the work, because prices have gone up so much.

Editor: Have you any views on the possibility of improving the immediate surroundings of the cathedral?

Sir Giles: The surroundings of the cathedral will certainly be improved in time, and several schemes have been produced. The main objective is to open up the land opposite the central tower to give a general open space in front of the main approach.

Editor: That, I suppose, is in the hands of the city planning authority?

Sir Giles: Yes. They have known for a long time that this area is going to be completely altered, and even before the blitz, when they demolished some old slummy houses in this area, they decided that they would not rebuild until they had planned what was going to happen in relation to the cathedral. The blitz demolished a good deal more property, and it has all been left now, so that in time something will be done to improve that south side.

As a matter of fact, the cathedral is not quite oriented; we refer to the liturgical east end and west end, but the real north-south line is slightly different. We always refer, however, to the altar end as the east end.

Editor: Up to now the monuments in the cathedral have been either designed or controlled by you. Have the dean and chapter a settled policy about future monuments, so as to avoid anything like a 'Westminster Abbey' effect?

Sir Giles: The monuments are now strictly controlled by the dean and chapter, in consultation with me. I think that a certain number of monuments are a help to a building, but they can, as in Westminster Abbey, be overdone. We can only hope that great care will be exercised in the future, but I do like a certain number of monuments; I think that they add a touch of interest to a building.

I have often been asked whether I would like to get rid of the monuments in the City of London Guildhall, but I say No. They are all pages of history, part of the life of the City. If they are taken out we should have a gaunt empty space like Westminster Hall, which is a magnificent shell but has a feeling of emptiness about it. At the same time, we do not want overcrowding with monuments; moderation in all things is the best line to take.

Editor: Who decided, and why, to complete each section of the cathedral wholly instead of first building the shell and completing the detail afterwards, as at Westminster Cathedral?

Sir Giles: The Gothic style does not allow you to complete the fabric before adding detail, as the detail is part of the fabric; the ornament is part of the structure. It is not like Westminster Cathedral, where you can build a plain shell and cover it with marble and mosaics afterwards. You cannot do that with the Gothic style; the mouldings and caps and carvings are all part of the structure. The Committee decided to build only such portions as they could see their way to complete with the funds at their disposal, instead of starting the whole cathedral and having to stop when a certain height was reached. We keep on building, going towards the west end, as the money becomes available for the purpose.

Editor: There are several questions which I should like to ask on construction. One which many people would ask is this: if you were designing the cathedral now, would you still employ a vaulted compressive masonry structural system? Do

you believe this to be the best for a building intended to last for many centuries? When you started this cathedral there was an established tradition of building which has now almost gone. So many new things have come in since. If you were starting now, what would you do?

Sir Giles: I still feel that many of these new methods—not so much new materials as new uses of old materials—are not so lasting as stone and brick. Concrete, of course, is a very old material, and no doubt it does last, but when you are building for centuries it is very doubtful whether it is desirable to employ some of the synthetic materials and some of the scientific applications of tensioned structure because we have had no experience of the influence of time upon them. Many extreme modern buildings weather very badly and are apt to craze and crack and to look very grubby; they have to be kept in spotless condition if they are to look well, whereas the old materials improve with time and become more mellow and beautiful.

Editor: I notice that you used reinforced concrete in the floor and in the outer roof.

Sir Giles: Yes, in the outer roof and over the porches, and so on, but it is on the inside, not exposed to the weather. I was thinking more of prestressed concrete as being an uncertain thing to use. Whenever I find that a modern method of construction suits my purpose better than an old one I adopt it. For example, I wanted a flat roof over the porches. In the old days a timber roof would have been used, but I did not want to use timber so I put reinforced concrete there and made it match the stone by chiselling the surface to show the aggregate which was composed of the same stone as the walls are built of. It looks well and matches the stone satisfactorily.

It is the same with the main roof above the stone vaults. In the old days timber would have been used for this, but I thought that ordinary reinforced concrete would be more lasting than wood in those positions, and there is no danger from the death-watch beetle, fire or dry rot. I have also used steel girders and reinforced concrete to support the bells and for other work in the upper part of the tower.

Editor: Has the building behaved as you expected? Has there been any appreciable movement, as there is liable to be in big buildings such as this?

Sir Giles: No. The cathedral is entirely on rock, so that there is no question of movement of the foundations. The building has behaved extraordinarily well and there has been very little sign of any settlement. There are a few little hair-cracks in the tower, but nothing more than you would expect in a big structure of this kind.

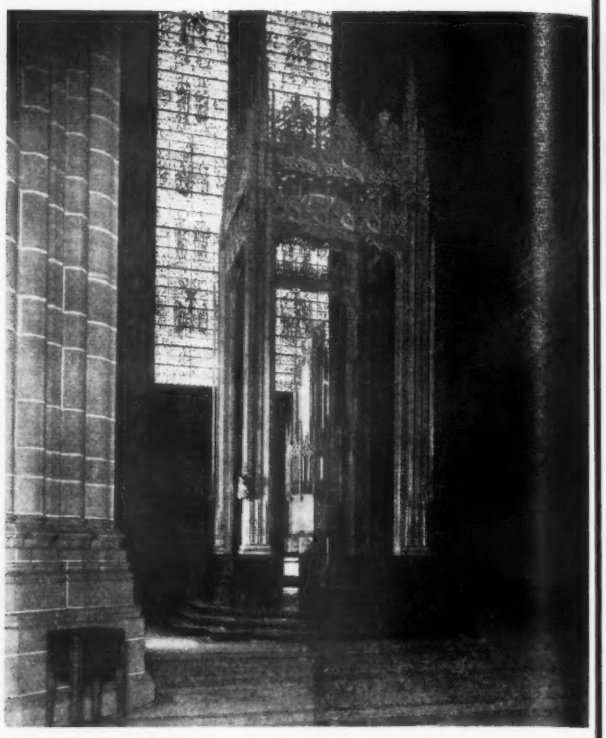
Editor: There have been no settlement troubles through the work on the building being done at different times?

Sir Giles: No. When we built the tower, which is very much higher than the rest of the building, we left a gap between that and the lower and older portion which was wide enough for a man to get in. We built the tower quite separately, so that there would be time for it to settle in itself, and, having left it for a year or two, we then filled in the gap.

Drawing of the view from the western end of the nave looking east. The first bay with the organ arch and steps is now being built

With regard to the vaults, which are entirely stone, without any reinforcement in the way of concrete or steel or anything of that kind, the committee were a little afraid that they might not stand up, because this is almost as big a Gothic span as exists anywhere, being 72 feet across. The com-

A tower window seen from a transept



The baptistery and font

mittee said that they would like to ask some engineers to express an opinion on it, and a very eminent firm of engineers went into the question and confessed that they just could not calculate it. They said that they could calculate each rib, but not the result when the filling in between the ribs was put in; it was too complex. I felt quite confident about it myself, because I have seen some very big vaults of this kind. There is a very big one at Gerona in Spain, which I think is 75 feet across, and of stone construction.

When the vault was completed and the last boss put in and the vaulting took its bearing, it separated from the centering so that there was a gap between the wood centering and the stone vaults and arches and ribs. We have never been able to find out what that was due to, but it freed itself from its centering of its own accord. I have a theory that the centering, since it had been exposed for several years to the rain, became thoroughly saturated, but when the vault was completed the centering was entirely protected from rain and so it dried and shrank. At any rate it was comforting to see the vault standing unsupported before the centering was taken away.

Editor: Has the Woolton sandstone weathered well in the salty, sooty atmosphere of Liverpool? Are you satisfied that the choice of that stone was a good one?

Sir Giles: The Woolton sandstone is an extraordinarily good stone for that neighbourhood. The choice was really made before I had any authority in the matter; it was done in Bodley's day. They went round with surveyors and others to look at all the buildings in that stone in Liverpool, and they found that those buildings had stood up remarkably well for a hundred years or more. It is a remarkably fine stone for that neighbourhood. The arrises are just as sharp as they were forty years ago.

Editor: The quality has remained good as the quarry has been worked?

Sir Giles: Yes. The committee own the quarry and we use only the very best stone. The builder operates it.

Editor: That brings us to the question of the builders and craftsmen and the method of building. I believe that you have had the same firm of builders all the time?

Sir Giles: Except for one little pier at the very beginning, which was provided so that King Edward VII could lay the foundation stone, the whole of the building has been done by Morrison and Sons of Wavertree, Liverpool, and it has been done on a schedule of prices. For work of this kind, that is undoubtedly the best possible way of building, because there is no question of any trouble with variations and you can alter and amend details as much as you like; the builder is paid for what he does. The only objection to it in most cases is that you do not know what the final cost of the building is going to be, but in this case we should never have known that anyway, because the work has extended over such a long period.

Editor: Did the work continue throughout the second world war?

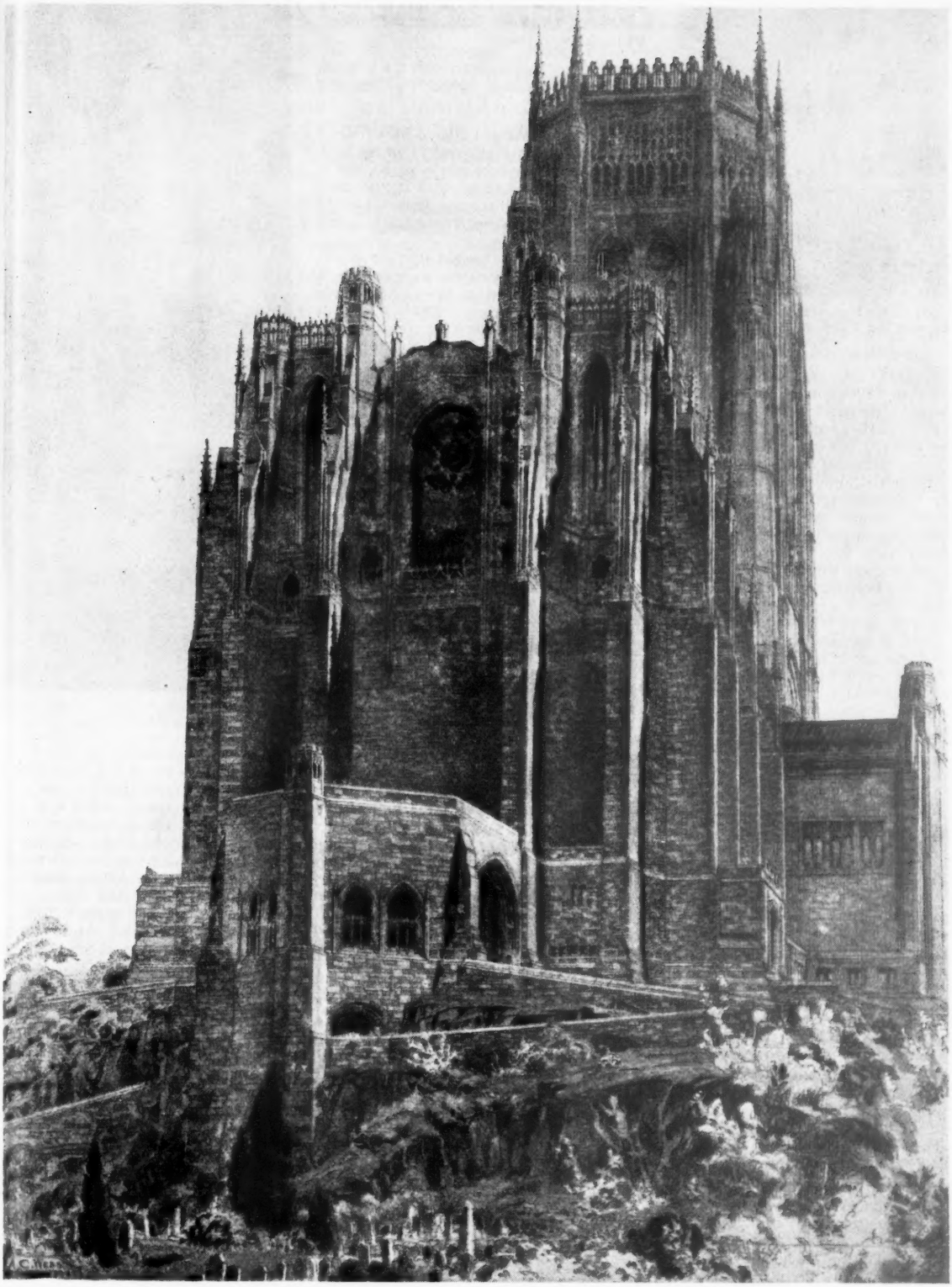
Sir Giles: Yes, it has never stopped; even two world wars did not stop it. There were a few people working on the tower and putting stone on stone at a time when the buildings round about were being smashed to atoms with bombs. The late King came to Liverpool to see the damage done during the war, and he was tremendously impressed by the fact that in spite of all the destruction we were still building. He said, 'Keep on with the work. There is great moral value in that; refuse to be beaten!'

Editor: Did the cathedral suffer damage?

Sir Giles: Yes, about £40,000 worth of damage, but about half of that was stained glass.

Editor: I suppose some of the men have spent most of their lives on this building?

Sir Giles: Yes. Some of the old masons have been there for more than forty years. They are grand craftsmen. The tower with its battered verticals—the whole thing tapers—is very elaborate, and the tapering of that elaborate masonry is a remarkable technical feat. It would be much easier if it were all vertical, but when it tapers, and everything is wider at the bottom than at the top, it is difficult. There are octagon turrets on the four corners of the tower and these taper in themselves and they are



Sir Giles Scott's design for the future west front of the cathedral. From a drawing by A. C. Webb

At the fixing of the highest stone on the tower. Sir Giles and the Clerk of Works, Mr. O. Pittaway

very elaborate at the top. These turrets give the skyline or silhouette of the tower and are tapered 1 in 80; for a square tower having right angle corners I usually make the taper 1 in 120, but in this case the angle turrets being octagonal it was made 1 in 80 to get the same amount of taper in silhouette. I usually set up the diagonal outline of a tower as well as the true elevation as the normal view is somewhere in between these two extremes. I would never build a tower without a batter on it, because it enormously improves the appearance of the tower.

I have never seen a book or article on this matter, but I should like to study the batters of mediaeval towers, because it is an element in design which I think has been completely ignored by the archaeologists who wrote so much about churches in the Victorian age; they never seemed to tumble to the subtlety of batter. I have noticed that in the buttresses, and sometimes in the wall as well, there is an obvious batter in these old towers, and it would be easy to find how much it is and what faces are battered and what faces are not. Another subtlety I have used at Liverpool is found in most of the pointed arches which are struck from four centres instead of two; this gives life to the arch form.

Editor: Have you any comments on the hypocaust type of floor heating?

Sir Giles: It has proved to be very satisfactory. It is augmented with radiators under large windows where there is a cold surface, but for a big building of this kind it is undoubtedly the best form of heating, specially for a building which, unlike a parish church, is in use all the time.

Editor: Have you any comments to make on your clients and the building committee?

Sir Giles: I must say that I think that they have been wonderful clients—both the building committee who deal with the building operations and the dean and chapter who take over the finished portions of the building. They do not hesitate to say what they think about designs, if I have to submit something special for their consideration, but they always say, 'You know our views. You know best', and they always let me have my way.

Editor: Was that so even with the original building committee, when you were a young man?

Sir Giles: Yes. When I altered the whole of the design they still decided to let me have a free hand. They were very wise, because if they had messed about with it and said, 'You must stick to the old design', I could never have put my heart into the building with that restriction.

At one time we thought that we would save some money by having a concrete core to the walls instead of brick. At present there is a stone facing on both sides, but the core is brick. We tried concrete, but we found that it discoloured the stone and completely spoilt the stone surface; there was too much moisture coming through the stone; we therefore abandoned the idea of using concrete and went back to brick.

Editor: Let me ask you again, what does it feel like to have a building under construction for half a century?

Sir Giles: It is very difficult to say. I often feel what a surprising thing it is that I have had one job for all my working life, and it has gone on continually and never stopped. That feeling does come over me at times, but I have become so accustomed to it going on that it is only occasionally that I get this wave of wonder, as it were.

Editor: Do you find that you do not think about it for weeks on end, when you are dealing with other problems?

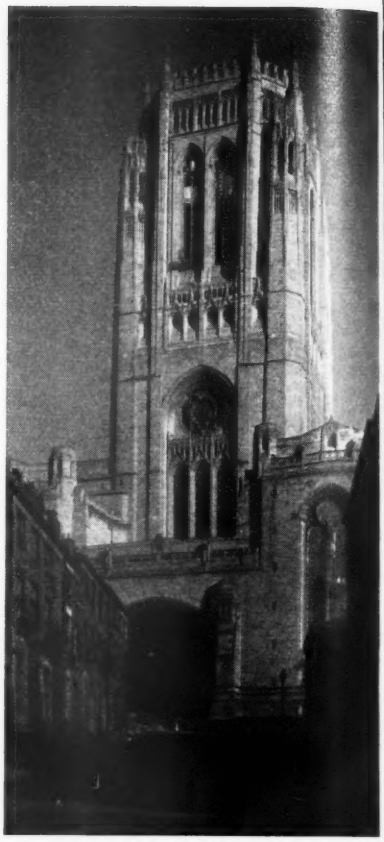
Sir Giles: Yes. I have been doing the detailing piecemeal all through the job. Very often the builder has said, 'If you do not let me have some more drawings next week I shall be hung up', and I then send him a sheet which will take him up another 20 feet, and then I leave it and get on with other work. It is risky in a sense, because if I died he would be in difficulty, but it has worked out all right. The detailing has been done gradually as the work proceeded.

Editor: The complete design of a cathedral by a single architect is an historic event and I feel that this attainment of a half-century in the building of it should not go unmarked.

Sir Giles: It is curious that it should have gone on for so long and that the work should never have stopped. It is unique, I suppose. Did not St. Paul's go on for forty years?

Editor: I have looked that up. They took five years arguing over drawings, two years clearing the site and forty years building, and then Wren was deprived of his surveyorship before the building was finished; he lived for another eight years.

Sir Giles: The modern movement as we understand it now did not exist when this building was designed. The competition



The tower, which is 308 ft. high, and the south entrance, the Rankin Porch

design was made more than fifty years ago, and it is forty-five years since the revised design was evolved. When I won this competition at the age of twenty-two, I read a paper on it to the architectural society of the Liverpool School of Architecture. The other day I was looking through this lecture and I found that I said one thing which is interesting: I said, 'Time alone will show whether this building is the last flare-up of the Gothic Revival.' I think that it has proved to be so.

Mock Arbitration at the R.I.B.A.

Held on 27 March 1953. Mr. R. E. Enthoven, Vice President, in the Chair

Cast: Arbitrator, Mr. E. D. Jefferiss Mathews, O.B.E. [*F*]; Counsel for the Claimant, Mr. J. Fox-Andrews, Barrister-at-law; Claimant, Mr. Harold Dexter, Contractor; Counsel for the Respondent, Mr. P. Macnair, Barrister-at-law; Architect, Mr. R. O. Foster [*F*].

In the matter of the Arbitration Act, 1950 and In the Matter of an Arbitration between A. Contractor (Claimant) and B. Employer (Respondent)

Before Mr. E. D. Jefferiss Mathews, O.B.E., F.R.I.B.A. (Arbitrator)

Mr. Fox-Andrews: May it please you, Sir, this is a dispute which arises under the R.I.B.A. form of contract where quantities form part of the contract. I appear on behalf of the Claimant and my learned friend, Mr. Macnair, appears on behalf of the Respondent. I understand that a copy of the contract has been delivered to you with other papers in this matter, and if I may, I should just like to deal briefly with the main points of this contract.

It was a contract whereby the builder agreed to build a factory for the employer at Croydon for the sum of £75,000. The agreement was made on the 11 January 1951, and it was agreed that possession of the site should be given on 1 February 1951. In fact, possession was given on that date. The contract is in the usual form, and the amendments in the body of the contract itself are not of importance, but I should like to refer you to the appendix. The main matter in the appendix, and a very unusual one indeed, is the time fixed for completion. The words are '31 December 1951'—that was eleven months after possession of the site was given—'subject to materials and subcontractors being available when required by the contractor to fulfil his building programme'. I do not wish to take up the time of this tribunal at the moment in dealing with the effect of those words, but it will be the contention of the contractor that time is put at large, that in fact there was never in this contract a time fixed for completion, and I shall, whenever I refer to the date in the contract, refer to it as the 'proposed time' in order to use a neutral term.

It will also be noted that as regards liquidated and ascertained damages, no figure at all was put in the contract. The time for honouring certificates was 14 days.

Those are the main matters and I do not think that I need refer to any of the others for the moment. But may I say that this dispute has, in the main, resulted from the fact that this work took 13 weeks longer than what was proposed, that is to say, it was not in fact completed until 31 March 1952. It is in respect of that period that the contractor comes before you and says that he is entitled to costs and overhead expenses for those 13 weeks. His contention really is in this matter that where, by reasons entirely beyond his control, work is delayed and he is put to additional expense, since the loss must fall on someone and since the building owner is getting the benefit of the work, it is only just and equitable in such circumstances that the loss should fall upon the building owner.

The case really at all times will be put forward under two heads; first of all, that as time was not the essence of the contract, if there was any delay—and I use the word 'delay' merely to indicate the time which it took beyond the proposed time—then the contractor is entitled to his expenses. If in fact time was the essence of the contract, which I very much doubt having regard to the wording I have indicated, then there was a duty on the architect by reasons with which I shall deal in a moment to have extended the time for completion right up to the date of completion, that is to say, for the 13 weeks.

If I may deal very briefly with how those 13 weeks are made up, in the first case the architect under Clause 18(ii) has made an extension of four weeks for some exceptionally bad weather which occurred particularly at the commencement of this work, and in respect of that there will be no dispute as to whether the time should be extended but merely as to whether or not the contractor is entitled to expenses for that period.

The next matter for which he claims an extension and his expenses is that on the 2 August he received certain amendments in the plant layout. I believe there is a bundle of agreed correspondence in this matter, and I do not propose to read out every letter. Doubtless my friend will refer to the other letters which he wishes to have read, but if I might refer you to the letter of 1 August written by the architect to the contractor, the first paragraph reads: 'Dear Sir, I enclose 2 copies of Drawing No. PED/27 showing the amendments to the plant layout at the above and shall be glad if you will put the necessary work in hand at once.' On the following day the contractor wrote to the architect: 'I thank you for your letter of yesterday's date enclosing amended details of plant layout and this will enable me to proceed. I would mention that the non-receipt of these drawings has seriously handicapped the preparatory work by the plumbers, who have actually had to leave the site for the past week as they could not proceed.'

Two letters on, in a letter dated 4 August from the architect to the contractor, he writes: 'In reply to your letter of the 2 August, I cannot agree that the amended details of plant layout were issued to you too late. There would have been plenty of other plumbing work on the job for your men to get on with if you had arranged for them to be supplied with the necessary materials. In any case, the details of plant layout were sent to you immediately they had been settled by my client.' As regards that, if I might refer you to the progress chart you will observe——

The Arbitrator: This progress chart was sent to me, but it is not clear whether it is an agreed document.

Mr. Fox-Andrews: It is an agreed document, but it is the contention of the contractor that it is not a contract document. If you look at the plumbing you will observe that in the five weeks from the end of July and the beginning of September as well as the whole of August the plumbing work was held up for five weeks. The contention of the contractor is that not only was the plumbing work completely held up by reason of having to change a 1-in. water main to a 1½-in. water main as a result of the amendment in plant layout, but that the whole work got slowed down as a result, and for that he asks for an extension of two weeks.

The next matter on which he claims an extension is in respect of bricks. If I might refer you to the letter of 2 June 1951 which he wrote to the architect, you will see that he writes: 'I would further mention that the Croydon Building Surveyor has been on the site and condemned the stock bricks: he has had 18 of these set aside and I am to send them for testing to Mr. R. H. H. Stanger, and this I am arranging to do.' He sent the bricks to be tested and did not receive the report back until the 16 June. If you will look at the copy of that report which follows immediately after the letter of 2 August 1951, you will see that of the 18 bricks sent, 15 were perfectly satisfactory, two were below the requirements, one being a bad brick, and as a result of that test the Croydon building surveyor was happy with the bricks and work was allowed to proceed. As a result of that delay, however, which was no fault of the supplier of the bricks nor of the building contractor, the whole of the bricklaying work got held up for two weeks and it affected all the other trades in its turn whereby the work in that respect was also delayed for two weeks. The architect made no extension whatever for that.

The third matter for which he claims another two weeks is Communist influence. If you look at the progress chart under the heading of 'Electricians', you will see that in the first week of June electrical work did in fact commence, but there followed a period of seven weeks during which no electrical work was done at all. The contractor wrote on the 2 June to the architect saying: 'I would point out that I am faced with considerable difficulties in obtaining the requisite labour (particularly bricklayers) and that there appears to be a

definite Communist influence at work which is slowing up normal production.' The architect wrote in reply: 'Thank you for your letter of the 2 June. I must continue to press you for speedier production and in doing so would say that the political convictions of your workmen are nothing to do with the architect.'

If you look at the letter of the 2 October, it is not very clear but it looks as though he was able to get rid of the main trouble-maker a little earlier than the date of this letter. He says: 'As you are aware, I have had considerable trouble with the Communist element among the operatives but you will be glad to know that as a result of a definite breach of the Working Rule Agreement I have been able to dismiss the chief trouble-maker. A Disputes Commission sat and has decided that work should be resumed without any recommendation as to re-employment of the man in question.' As I said there was a total of seven weeks during which the electrical work was completely held up, and the result was again a slowing down of the whole job for which he claims this period of two weeks.

Then there is the matter which concerns nominated subcontractors. The work concerned with heating was given to the nominated subcontractors who in turn had made arrangements for the delivery of a boiler by a well-known boiler manufacturing company, but, unfortunately, by reason of the very heavy rearmament programme on which the firm was engaged there was a considerable delay—I think it was of three weeks—during which time the whole of the heating work was held up. Although the contractor is claiming the whole of the three weeks, it will be appreciated that that has slowed down other trades as well. That is in fact how he makes up the nine weeks.

The last matter upon which he comes before you—although small in its way nevertheless a controversial matter—is that in December 1951 one of the nominated subcontractors—the metal window people—delivered their final account for the work which they had done. For some reason which is not apparent, none of the work had been included in any previous interim certificates, and although the account was rendered to the architect, I think by the middle of December, in fact not until certificate No. 14 was issued on the 5 April 1952 was there any provision for payment. When the contractor attempted to deduct his 2½ per cent cash discount when paying the metal window people he was met with very serious opposition from them, and in fact in order to smooth over the position he had to pay them the full amount of their account, and he says that in view of the great delay on the part of the architect, he is entitled to look to the building owner to be reimbursed for this loss which was not through any fault of his at all. He did in fact pay the subcontractor within fourteen days of the certificate being received——

The Arbitrator: Will you be calling evidence which will clear up a matter which is not quite clear from your statement on the question of dates?

Mr. Fox-Andrews: I think they are agreed dates.

Mr. Macnair: Yes, they are.

Mr. Fox-Andrews: Work was completed by Metal Windows Ltd. on 31 October 1951; their account was sent to the architect for checking on 15 December 1951, and the account was agreed with the architect in the middle of January 1952.

The Arbitrator: We have no more accurate date than that?

Mr. Fox-Andrews: Not at the moment. Certificate No. 14 was issued on the 5 April 1952.

The Arbitrator: Thank you; that has clarified the matter.

Mr. Fox-Andrews: I do not intend at this stage to address you as regards the counter-claim which the building owner has seen fit to put in in this case. It has been agreed between the parties that subject to liability, which is of course most strongly contested by the contractor, the damages which were not specified in the contract at all have been agreed at a rate of £30 per week.

I think that those are all the matters I wish to put before you at this stage and I will now call Mr. Contractor before you to give evidence in this matter.

SUMMARY OF EVIDENCE

Mr. Alexander Contractor was then called and was examined by Mr. Fox-Andrews. Asked by counsel whether he had made it perfectly clear in a number of letters that he was most reluctant to bind himself to any particular date so far as the completion of the work was concerned, Mr. Contractor said he thought that twelve months would be needed but, yielding to pressure, he could do it in eleven months always providing that materials and sub-contractors fitted in. Asked by the Arbitrator whether it was his normal procedure to include a conditional term in his building contracts such as was included in the contract in evidence, Mr. Contractor said he would not say that it was normal, but in the particular case, where he was being pressed and could foresee the possibility of difficulties, he thought it was essential to sound some note of warning that the job was dependent on other circumstances than his own ability and work.

Asked to describe the weather at the commencement of the work, Mr. Contractor replied that it was typical English weather—vile, and he agreed that it was the sort of weather one might expect in February. It lasted for about a week and the spring which followed was not very good.

Dealing with variation No. 27, Mr. Fox-Andrews asked how far the work had developed at the time the variation was received. Mr. Contractor replied that the general carcassing was in, but the variation completely altered things. It necessitated the laying of a new 1½-in. water main instead of a 1-in. main which required a considerable amount of negotiation with the water supply authorities. He had no idea that the variation was going to be issued until the plant layout was suddenly sprung on him. As a direct or indirect result of the change he estimated that work was held up by from four to five weeks.

As far as the question of the bricks was concerned, Mr. Contractor said he was staggered at the result of the Croydon Building Surveyor's inspection. Stock bricks, as specified by the contract, were used and were obtained from a reputable firm with whom he had dealt for many years. Following the test report of Mr Stanger, the Building Surveyor gave permission for work to continue, but the bricklaying was delayed for fourteen days as a result. In fact, said Mr. Contractor, a miasma spread over the job completely. In that respect he claimed that he was entitled to two weeks' extension.

Coming to the question of the delay in electrical work due to Communist influence, Mr. Contractor agreed that under the terms of the contract it was his duty to take all possible steps to ensure that the nominated subcontractors got on with their work at the greatest possible speed and to the best of their ability. Asked whether he did in fact take such steps, Mr. Contractor replied: 'I did all I possibly could. I do not know what else I could have done. It is difficult for a general contractor when dealing with specialists such as electricians. One knows what is happening and that is all one can do.' The Arbitrator pointed out that according to the chart the Communist element spread quickly, for they appeared to have walked off after one week. Mr. Contractor confirmed that there was no electrician on the job after the first week until they returned. There was also a tendency for the trouble to spread to the bricklayers.

Dealing with the delay of some eight weeks in the heating work, Mr. Contractor said that the nominated contractor was a reputable firm and that the delivery of a boiler was delayed, he gathered, due to the production line being turned over to armaments. He estimated that the delay from the promised date was some three weeks.

The Arbitrator said that he was a little disconcerted to hear that the job had broken down under Communist influence due to difficulties over water, bricks and other things, and he asked Mr. Contractor whether he was satisfied that the general foreman was doing his best to overcome the difficulties. Mr. Contractor replied that he had the very best general foreman it would be possible to find. The site organisation was very good and he was continually there himself.

Turning to the question of the cash discount in respect of which the contractor maintained that he was entitled to £37 10s., Mr. Fox-Andrews asked Mr. Contractor whether the architect had told him on what

date he had agreed the figures with Metal Windows Ltd. Mr. Contractor replied that the first he knew of the architect having received the account was the reference in his letter of 5 April. It was a fact that within 14 days of the certificate being received he paid the subcontractors, but when he attempted to deduct his discount it was not allowed, and he had to send the firm another cheque for £37 10*s*.

Mr. Fox-Andrews: As regards these 13 weeks, you claim to be entitled to a pro rata proportion of the overhead expenses which were incurred during that period? **A.** Yes.

Q. As I understand these figures, you contend that for the purposes of ascertaining the overhead expenses of that period you are entitled to take the preliminaries as set out in the bill of quantities and obtain the cost of the preliminaries per month, per week or any other period, and are entitled to that monthly sum with certain deductions in respect of the one week general foreman and two weeks timekeeper? You claim as a basis £280 per month? **A.** Yes.

Q. And your claim is some £855 10*s*.? **A.** Yes. I was asked to do this work in eleven months and the preliminaries came to £3,080. My contention is that the preliminaries cost the job £280 per month, and since we were three months overdue through no fault of my own, I am entitled to three months at that rate.

Cross-examined by Mr. Macnair, Mr. Contractor said it was a coincidence that the amount of delay which he assessed had been caused through circumstances entirely beyond his control was exactly the length of the delay of the contract. The Contractor said he thought he could say that he had yielded to pressure when he consented to do the work in eleven months in the first instance, but when asked by Mr. Macnair whether he agreed that he had from some date after 15 December to decide how long the work would take, he replied that when one gave an estimate one hoped and trusted that everything would be all right.

In reply to Mr. Macnair's suggestion that from the very first operation of excavators coming on to the site the work was two weeks behind according to the progress chart, Mr. Contractor said that the progress chart was an optimistic hope. He refuted the suggestion that he went into contracts with rather too optimistic a view. 'On the occasions when in fact working time has been longer than the estimated working time, it has always been as a result of something out of your control?' asked Mr. Macnair. 'I put the time down I think it is likely to take and if it takes a little longer I regret it,' replied the contractor.

Questioned about the letter of the 4 August in which the architect pointed out that there would have been plenty of other plumbing work to do if the contractor had arranged for the supply of necessary materials, Mr. Contractor replied that in his view that was a mistaken opinion. **Q.** Why did you not write and say it was wrong? **A.** It is diplomatic sometimes not to reply. **Q.** I am surprised that you have said nothing in reply to the allegation. **A.** One does not upset architects readily.

Dealing with the delay in the heating work, Mr. Macnair said it seemed odd that the non-delivery of a boiler should prevent the start of the heating contract. Mr. Contractor pointed out in reply that it was necessary to have the boiler because the boiler house was being built round it.

Q. You are blaming the subcontractors for this delay? **A.** Yes.

Q. Are you saying that it is the architect's fault? **A.** No.

Q. Of course you are familiar with the details of the contract? **A.** Yes.

Q. You realise that you can get indemnity for delay caused by the subcontractor? **A.** Yes.

Q. Are you going to do anything about that? **A.** No; not in this case. The only possible way I could do anything about subcontracting delay is if damages were being claimed against me.

There was no re-examination, and Mr. Macnair called Mr. Alexander Architect, In reply to the question why he wrote in his letter dated 1 June that the work was at that time three weeks behind, Mr. Architect said that it was obvious from the progress schedule which was kept in the clerk of works' hut that the work was three weeks behind. The concretors started two weeks behind the proper time and at that time the steelwork people, who should have started work three weeks earlier, had not arrived on the site at all. He agreed that on the 1 August, when he assessed the delay at six weeks, a further week's extension for bad weather was given. As to the allegation about the delay caused by Communist influence so far as the electricians and bricklayers were concerned, Mr. Architect replied that on the 1 August the electricians had only done one week's work out of eleven. Extra time was given on 1 October when the total delay was assessed at two months. Asked what he considered to be the cause of that delay, Mr. Architect said that in his opinion the whole job was disorganised and behind. The foreman did not seem to be able to get things done and the men were unco-operative. The carpentry took eight weeks longer than the scheduled time due, in his view, to the fact that there were never sufficient men on the job.

Dealing with the allegation that there was three weeks' delay due to the late delivery of the boiler, Mr. Architect maintained that there was nothing to prevent the men getting on with all the internal heating work without the boiler. He agreed that the boiler had to be built into the boiler house but pointed out that there was an arrangement whereby some brickwork could be left down.

As to the alteration in plant layout delaying proceedings by two weeks because the contractor could not get on with the plumbing, Mr. Architect said that there was a great deal of other work they could have got on with, and he sent the amended details to the contractor as soon as they were settled.

Asked in cross-examination whether he was saying that in respect of the nine weeks for which he refused to make any extension of time the contractor was wholly to blame, Mr. Architect replied that he thought he was.

Dealing with the delay due to Communist influence, Mr. Fox-Andrews asked Mr. Architect whether he knew that under Clause 18 he had a duty to grant an extension of time if work were delayed by 'local combination of workmen, strike or lockout affecting any of the trades employed upon the works'? Mr. Architect agreed that he had a duty and that if such an extension were made it would affect his employer adversely. 'Therefore', continued Mr. Fox-Andrews, 'is it not of some importance if you are to hold the balance fairly between the building contractor and the employer to ascertain whether or not Communism is having some effect upon the work?' Mr. Architect pointed out in reply that the contract read 'civil commotion'. Stating that he had not quoted those words, Mr. Fox-Andrews asked Mr. Architect what he would consider his duty to be if in fact there was a working to rule as a result of which there was a week's delay. 'I should consider it would be my duty', replied Mr. Architect, 'to grant an extension if the contractor made out a good case that the work had suffered, but in fact he had not.'

He did not suggest that there was any default on the part of the contractor with regard to the delay caused when the bricks were sent away for testing. It was unfortunate that the Building Surveyor happened to call on that day.

With regard to the plant layout, Mr. Architect said he produced half-a-dozen drawings of the layout before they got it right. He knew that a 1-in. water main had been built in and he told the contractor that a new layout was imminent. He suggested that there was a great deal of other work which the plumbers could have got on with and that the amendment did not cause the delay. He admitted, however, that the claimant was possibly entitled to two days as a result of the amended water main.

On the question of the heating arrangements, Mr. Architect said that all the heating drawings were agreed and all that was necessary was to link up with the boiler. He suggested that the eight weeks' delay had nothing whatever to do with the non-delivery of the boiler and that Mr. Contractor was mistaken when he said it was essential for it to be on the site.

In answer to counsel concerning the account of Metal Windows Ltd., Mr. Architect agreed that he received the account about the middle of December 1951, and that five and a half months was a fairly long time for subcontractors to wait for a settlement of the account.

Asked by Mr. Fox-Andrews whether he appreciated that, as regards delays caused not by default of the contractor, even on the ordinary contract in most cases the contractor was entitled to an extension, Mr. Architect agreed that under specified sections of the contract he was entitled to an extension. 'Are you telling us that there was no delay at all of any kind by the nominated subcontractors?' continued Mr. Fox-Andrews. 'I should not say that', replied Mr. Architect, 'but I am saying that there was no delay which under the contract could entitle the contractor to an extension.' **Q.** Are you saying that there was no delay by nominated subcontractors which the contractor could not have avoided? **A.** I think there was no delay which the contractor could not have avoided. **Q.** Not even one day? **A.** Not by nominated subcontractors.

The Arbitrator referred to the question of the water supply and asked Mr. Architect what steps he took in the matter. Mr. Architect replied that he had taken no steps on the amended details because the question of the water supply had been gone into in the initial stages of the job, and the conclusion was reached that it was all right.

Asked in re-examination whether at any time he received from the contractor notification in writing as to any of the delays falling under the terms of Clause 18, Mr. Architect replied that he had not.

CLOSING ADDRESSES BY COUNSEL

Mr. Macnair: I do not propose to address you at any great length on this matter because, if I may say so, you have listened with the greatest patience to the evidence, and I am sure that you have all the essential matters before you already.

Of course, in essence this is a claim in which you have to decide who is to pay if you come to the conclusion that there has been a delay which falls under the contract or a delay which is not the fault of either side. We are dealing with a man who has been described by learned counsel for the contractor in his own words as a successful and prosperous architect, and if my friend be right, you have to come to the conclusion that he has been grossly incompetent over his job. The competence or prosperity of the contractor remains wrapped in mystery, but I hope that you will come to the conclusion that in fact there is a considerable degree of incompetence on his part.

I do not propose to go in any detail into the various allegations of bad site organisation which have been mentioned. A glance at the discrepancy between the actual work done and the anticipated work done in the progress chart is, in my submission, in itself quite sufficient evidence to show that there has clearly been a delay to a certain extent as a result of bad site organisation.

Of course, the question which really has to be decided in the main is if there has been a delay which is the fault of neither party, who is to pay for it? As far as the contract is concerned, in my submission the position is this. If in fact the contractor is successful in obtaining an extension under the terms of the contract, either under Clause 18 or under this curious term under the appendix, in my submission all that means is this: the contractor is absolved from damages for that period, but it does not mean to say that the unfortunate building owner has to pay for the expenses which the contractor incurs which are the fault of neither party, and are certainly not the fault of the building owner. In my submission all that happens is that the contractor no longer has to pay damages, whether they be liquidated or not, which otherwise he would have to pay through his failure to complete the contract in time. It does not mean that the building owner has to pay for something which arises through no fault of his own.

What exactly is the meaning of this admittedly agreed term in the contract? Clearly it must mean something but, in my submission, it means very little at all. It reads: 'That the date of the completion is 31 December subject to materials and subcontractors being available when required by the contractor to fulfil his building programme.' Of course, you will appreciate that already under Clauses 1 and 18 of the contract there are specific provisions to cover situations which in fact the building contractor is now putting into the appendix. It is quite clear that this is not a new term put in in substitution of Clause 1 or in substitution of Clause 18, and one would have thought that if in fact the contractor had meant it in substitution, he would have struck out Clause 18 or the relevant parts thereof and would also have struck out the relevant parts of Clause 1. He has not done so. He relies apparently on Clause 18.

What in fact is the new clause? I would ask you to say that it is nothing more than surplusage, and that it has no relevant meaning at all, and one is relying on the ordinary terms of the building contract. Of course, if that be so, as far as a number of these claims are concerned my friend is in grave difficulties, because even if we accept the full value of the appendix, all it deals with is the subject of materials and subcontractors being available when required. There is nothing in the new clause to deal with local combinations of workmen or civil commotions, and in my submission, of course, we are not assisted in any way from evidence as to what exact effect the Communism had. There is no suggestion that it resulted in strikes or local combinations, nor is there any suggestion in the appendix that in fact the subcontractors have been delayed. If he is to rely upon Communism as causing the delay, the only way, in my submission, he can rely upon it is to bring it under Clause 18. The only way in fact he can rely upon the delay caused by subcontractors is again to rely on Clause 18, but he cannot rely on those clauses because he has not fulfilled the necessary requirement of the Clause which is to notify the architect upon the happening of any of the events within the clause by giving immediate notice in writing. As those particular causes of delay of which he is complaining cannot fall under the new clause he put in, in my submission he cannot rely on them at all because he has failed to bring himself within the terms of Clause 18 by not giving effective notice in writing.

That is all I wish to say about site organisation and delays as alleged by the contractor except, perhaps, to say that of course what he has made here is a general allegation, and he has for the sake of convenience broken it down to a figure which by sheer coincidence comes to the exact amount of damages which is claimed.

There are only two other matters upon which I need address you. One concerns the 2½ per cent discount. I cannot see and I fail to understand under what possible clause my friend says that he can claim this sum of £37. In fact, under 21(*b*) it says in terms that the subcontractor shall be paid by the contractor within 14 days of receiving from the architect a certificate including the value of such work. That was in fact done. If the contractor chooses to bend to the influence of the subcontractor, that is his fault, and there is no reason normally why the building owner should be asked to pay for it.

I have made my submissions on the bill of quantities in cross-examination and I do not think that I need address you on that. I would ask you to say here that this is an occasion upon which you should quite clearly dismiss these allegations made by the contractor as preposterous allegations and say that all these extra nine weeks are weeks for which we should receive a sum in the way of damages for delay. The building owner, you will be glad to hear, is of a charitable disposition in this case——

Mr. Fox-Andrews: I take the strongest objection that the building owner has not seen fit to appear at these proceedings, and for my friend to say that he is charitable seems to me a most objectionable statement.

The Arbitrator: You must leave out of your remarks to me any comments on the character of the building owner.

Mr. Macnair: I am surprised that my friend should be so sensitive, and find it odd that he should object before I have even had time to make my point.

The Arbitrator: I think that it might perhaps be better if you did not make the point.

Mr. Macnair: All I would ask you to say is that I am entitled to a measure of damages which have been agreed between us at £30 per week for a period of nine weeks, which comes to a total of £270.

Mr. Fox-Andrews: May it please you, Sir, in my opening I ventured to suggest the basis upon which the contractor puts forward his case, and I do not intend to that extent to repeat it at all. Neither do I intend to deal at any length with the evidence which has been called before you in this matter. The contractor's claim is on the basis that time never was the essence of this

contract at all. That is his first contention. If you were against him on that contention and held that time was of the essence then, of course, his contention is that by reason of the matters he has put before you he is entitled to the remaining nine weeks which have not been previously extended. Whichever way you reach a conclusion in his favour he is entitled, in my submission, to come here before you and say 'For those thirteen weeks I am entitled to my overhead expenses', the reason being, as has been pointed out, that the loss must fall on someone but that it should not fall upon the contractor if no fault at all attaches to him.

As regards the question of construction, whether time was or was not the essence of the contract, it is important to bear in mind certain principles. The first is that where the parties agree what the terms of the contract shall be, in writing, then it only remains in that case for the Arbitrator or the Judge or anyone else who is trying the matter to interpret the words of the contract. What do the words mean? If in fact he discovers in the contract words which are contradictory or difficult to read one with the other, one of the results is that words which have been added in writing must take effect over words in print. The reason for that is fairly clear and reasonable, namely, that whereas the printed contract was merely purchased by paying two shillings, the additional words quite clearly show what was in the mind of the parties at the time they contracted, and it is a very important and very distinct rule that the court must give great weight to words set out in the contract. If that is the case, and in fact there is a completely contradictory meaning between the two, then the proper duty of the parties I believe is to take it to the lawyers. But in this matter the parties want justice and justice at your hands, and they do not want to go to the expense of having this dispute decided in court. It remains to you to decide what was meant in this contract.

The words in the appendix do not in any way suggest that if there is a delay owing to failure of materials to be ready at a particular time then the architect is to certify. 'No', says my friend, or would say if he had the opportunity to speak again, 'Clause 18 deals with that point', but Clause 18 was in the contract anyway. What those words can only mean is this: 'I do not like agreeing to a time in this contract at all. I am willing to put forward the 31 December as being the probable date of completion, but I want you to get quite clear that if for any reason at all (I am not interested in the rules about having to come to you with a request in writing before I get an extension) there is a delay in this work, then I am entitled first of all to say that the time is at large, second to say you are not entitled to damages and, third, I am entitled to recover my overhead expenses.'

I do not wish to read out long passages of the law, but I would refer briefly to what was and still is the law in a building contract. 'In building contracts time is not the essence in the absence of express words making it so . . . the mere insertion of words making time the essence would be negative if they are inconsistent with other terms of the contract.' The date of completion is 31 December 1951, subject to certain matters, and there is no power under that particular part of the contract for the architect to extend the time of completion and therefore keep the matter regulated. It is no good the respondent coming forward and saying 'Well, the architect has power under another clause.' It is clear that it was the intention of the parties that time should not be binding.

The only other piece of law I wish to refer to is this. It is in regard to liquidated damages. Of course, in this case there are no liquidated damages as such, but that fact does not prevent a building owner from coming before you and saying he is entitled to damages. 'In many cases the time fixed for the contract ceases to be applicable on account of some act or default of the employer or his architect. A provision therefore is generally inserted in order to avoid such acts or defaults destroying the right of liquidated damages by which an architect is empowered to grant an extension of time in certain specified events . . . (reading to the words) . . . stipulated by a contract.' As you have these additional words appearing in the appendix without any right to extend, therefore time is at large.

The immediate result of that is to dispose of the charitable claim of the building owner, because that goes if time is not the essence of the contract. There is an implied agreement between the building owner and the contractor that the contractor will use reasonable diligence and complete within a reasonable time. It is not being said 'Well, the architect has come before you insisting that this work should have been finished nine weeks before it was in fact finished.' That is not the position at all. Otherwise, why make it necessary to stipulate the completion date if in fact the architect can specify the time he would specify if time was of the essence?

Another matter concerns these rigid technical matters which architects seem to bring up in these cases about not having received any notice in writing. I do not know what more notice could have been given in this case by the contractor. The letter of 2 June complains of work being delayed by Communist influence. I do not know what the architect wanted. Perhaps he wanted a picture or a drawing or something like that of what was going on, but it seems to me that cogent notice was given to the architect as to the delay in this matter.

The position under Clause 1 of the contract is that where a contractor has been put to expense by reason of compliance with the architect's instructions, the additional sum is to be added to the contract. If there is one thing the architect admitted it was that at any rate for a day or two the work was delayed by reason of compliance by the contractor with his, the architect's, instructions over the variation. I ask you to accept that it was not one or two days but two weeks. Having regard to this plan, it is clear that there were a number of major alterations which had to be made in the work, and since it is quite clear that the contractor was put to additional expense, it is expense which must be added to the contract sum.

I am quite confident that the Claimant will receive ample justice at your hands and will also see the counter-claim against him dismissed completely.

AWARD

The Arbitrator explained that normally, after thanking Counsel for their assistance, he would state that he would consider his award and in due course tell the Parties when it could be taken up. However, as this was a mock arbitration he asked those present to imagine that a fortnight had elapsed and that he was making his award. In the interests of time he would omit from his award a number of the legal terms.

The Arbitrator: In respect of the Claimant's claim for the extension of the contract for a further nine weeks beyond the agreed extension of four weeks, I determine that the contract time is extended by four weeks under Clause 18 (ii) of the contract, and I further determine that the contract time is further extended by four weeks under the operation of Clauses 18 (v) and 18(*a*) of the contract making thereby in all an extension of eight weeks.

In respect of the Claimant's claim for additional expense incurred as a result of his contention that the contract should be extended 13 weeks, I determine that the Claimant is entitled to be reimbursed for certain expenses he has incurred by reason of my aforesaid determination that the contract time shall be extended for eight weeks, and I hereby award the Claimant the sum of £524.

In respect of the Claimant's claim for loss of 2½ per cent cash discount on the nominated subcontractor's account for metal windows, I determine that the Claimant has not established this point.

In respect of the Respondent's counterclaim for damages for breach of contract, I determine that the Claimant committed a breach of contract in failing to complete the works finally within the extended contract time of eight weeks and I have therefore determined and award that the Respondent receive damages to the value of £150.

The remainder of the award takes the form of how the sums shall be paid, and so forth, and finishes up with the question of the Arbitrator's fees which he has apportioned in the following manner: forty guineas to be paid by the Respondent and ten guineas to be paid by the Claimant.

QUESTIONS

Q. Is it still necessary for the Award to be stamped before it is taken up?

Mr. Jefferiss Mathews: No, that is not necessary.

Q. Can you state at what stage the Arbitrator first sees all the papers?

Mr. Jefferiss Mathews: Normally some little time before the Hearing. The usual procedure would be for the Arbitrator to meet the solicitors in the case in order to arrange the practical details and at such a meeting (he must only see the parties together of course) he arranges that on a certain date before the Hearing an agreed bundle of documents will be handed to him.

Q. Supposing either party is dissatisfied with the Award for any reason. What steps can be taken, if any?

Mr. Fox-Andrews: You cannot revoke the Award unless you take it to the courts and show that it is bad on the face of it, that the Arbitrator was fraudulent or that he had some unknown bias which has subsequently come to light, but even that is not too easy. The courts do not like interfering with an Award if they can avoid it on the basis that if the parties have agreed to keep clear of the courts then they should be bound by any Award given by an Arbitrator.

Q. Is it desirable for the Arbitrator to call for any documents other than the agreed documents and, if so, is it necessary to stop the Hearing and wait for the documents to be produced and agreed before proceeding?

Mr. Jefferiss Mathews: If the Arbitrator is not satisfied that the documents put before him are sufficient, he can ask for further documents and if they cannot be produced he may have to adjourn. The documents have obviously to be produced in the normal legal way.

Q. With regard to the phrase 'time not being the essence of the contract', if that is so, what in fact does the contract period mean, and what is the purpose of the penalty clause? Secondly, if the client wishes to make a claim for delay by the contractor under the particular penalty clause, must it have been notified to the contractor early on, or can it be held in reserve until the contractor makes a claim?

Mr. Fox-Andrews: It can be held in reserve. I disagree with the learned Arbitrator in this particular case and I do not think that time was of essence, but the contractor would be bound by the Award.

Q. On this question of time being of essence, would there not be a right on the part of the contractor to take it to the High Court for a case to be stated?

Mr. Fox-Andrews: That is something different. If a large sum of money had turned on the decisions made I should have asked for a case to be stated. If the Award is given without any request by me for a case to be stated then I am in difficulty.

Q. What is the procedure if two Arbitrators were appointed, one by each side, and they fail to agree? Is the case re-heard before the Umpire?

Mr. Fox-Andrews: If the two Arbitrators have been able to agree any of the matters, then they need not be taken before the Umpire. As regards all matters still in dispute, he must hear everything.

Q. Is it within the powers of the Arbitrator, after the completion of the Hearing, to ask for documents which he feels would help him in reaching a decision on a specific point and of the extent of which he knows?

Mr. Macnair: I think that at any stage before he makes his Award the Arbitrator can call for documents. Of course he must give all parties opportunities to address him again on those documents.

Q. I think that the Arbitrator allowed overhead charges in the preliminaries to the contractor for the period of wet weather?

Mr. Jefferiss Mathews: Yes; I considered it a reasonable interpretation of the contract that I should assess the reduction of those items for any profit, and that I have done. It is the net cost of those items.

Q. Was the bill of quantities prepared by the architect's staff or by an independent quantity surveyor? If by the latter, would not the quantity surveyor be in attendance at the Arbitration?

Mr. Jefferiss Mathews: Most certainly, I should think.

Q. Would you say what you allowed for the four weeks' time which was included?

Mr. Jefferiss Mathews: I accepted the delay of two weeks on this alteration of plant layout, and I also accepted the two weeks on the bricks.

Q. With regard to the 2½ per cent discount, a large number of quotations have 2½ per cent discount and if we accept those terms surely we are unable to fulfil the condition because it is a long time before we get certificates out after receiving the account?

Mr. Jefferiss Mathews: I think personally that the architect has a duty to watch all these points and to see that he conducts his administration of the contract in a way which will enable it to be carried out. In this particular case I think that the architect could have issued a certificate in time and this question would not have arisen. On the other hand, the strict interpretation of the contract meant that the contractor had no claim. I believe that the obligation on the part of the architect is to see that these things do not happen.

Q. What is the architect's legal position in having to agree subcontractors' accounts on behalf of his client when his client has divorced himself from the subcontractors under contract?

Mr. Jefferiss Mathews: I think there is a definite obligation on the part of the architect to settle the whole account, and he cannot settle that whole account without agreeing the subcontractors' accounts.

Q. Is not that a matter between the builder and the subcontractor?

Mr. Jefferiss Mathews: No, not necessarily, because the builder's view of the account might be different from that of the architect.

Q. It is the quantity surveyor who is named in the contract as the person having charge of variations, and the only reason for the subcontractor's account being questioned at all is because it contains variations.

Mr. Jefferiss Mathews: I agree. In this case there was no evidence that there was in fact any dispute on this account, but it got hung up in the architect's office before being certified by the architect.

Q. Does not the difficulty about the 2½ per cent discount arise because the conditions of the contract are at variance with the terms under which the firms do business?

Mr. Jefferiss Mathews: I agree.

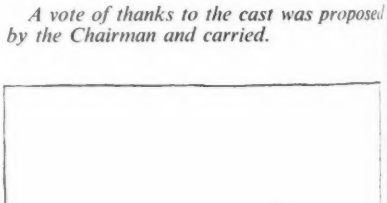
Q. Supposing a contractor wins a tender by putting in a reasonable price and when the whole thing eventually comes to arbitration it is found in the bill of quantities that he has in fact allotted quite a high proportion of his total cost to the preliminaries. How on the basis of those preliminaries could any Award be made fairly?

Mr. Jefferiss Mathews: You have to bear in mind that before a contract is entered into the architect has seen the priced bill of quantities. If a dispute arises subsequently on that the Arbitrator has to settle the dispute on the facts before him.

Q. He cannot question it?

Mr. Jefferiss Mathews: I should not have thought so because it is an agreed document.

A vote of thanks to the cast was proposed by the Chairman and carried.



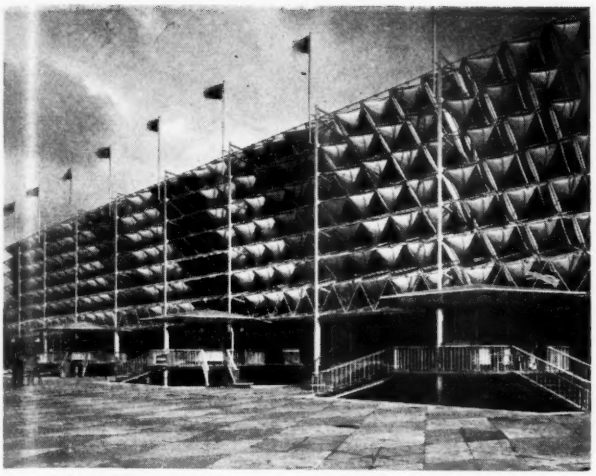


Fig. 1. The Fairway at the South Bank Exhibition showing tubular steel and canvas screen and diamond shaped paving

Fig. 2. Staircase, Regatta Restaurant, at the South Bank Exhibition, was typical of the staircases with cantilevered treads, some of which showed signs of failure

Successes and Failures of New Techniques

By Howard V. Lobb, C.B.E. [*F*]

A Science Lecture at the R.I.B.A. on 17 March 1953

Mr. C. H. Aslin, C.B.E., Vice President, in the Chair

Editor's Note. Mr. Lobb's lecture consisted mainly of a commentary on slides, many of which were in colour.

IT SEEMS TONIGHT as though it were about a year ago that I was asked to give this talk, and the title suggested struck me at the time as being so wide in its field as to give me ample opportunities of talking about modern architecture. As I have noticed that the majority of the audience at these lectures are young members, my remarks are particularly addressed to them with the hope that all may glean something from my review.

A short while ago I was present at the end-of-term activities of a school of architecture and the Head said in his review that one of the highlights of the year had been the bonfire which the students had made of the copies of some of the more traditional books on building design and construction. This remark was greeted with laughter in which I joined, but the full significance of this error has only come back to me in these last few weeks when I have been considering the subjects which I should mention tonight. How often during one's travels does one come across a building which, after being photographed by Dell and Wainwright while the paint was still wet, appeared in the ARCHITECTURAL REVIEW and caught one's fancy? Coming back to the building after an interval of many years one finds crazed and cracked rendered surfaces, streaks down the wall due to inadequate overhangs and a whole lot of minor defects of one kind and the other which makes one feel that a very great disservice has been done to the modern movement in architecture by carelessness in detailing.

So many of the forms of modern design are precise and machine-made, and it is, to my mind, absolutely essential that this precision should be retained for the life of the building and not suffer from streaks and smudges as is all too often the case. I think it would be generally agreed that the basic form of modern design comes from middle Europe and America, and I think there are several reasons why details which are eminently satisfactory in these countries will just not work over here. The pollution of our atmosphere, coupled with the relatively high humidity and rainfall, needs a much greater degree of protection than is necessary in these countries.

It has frequently been said that the exhibition is the nursery of experiment, and the Festival of Britain South Bank Exhibition buildings were no exception. I propose to comment on some of the forms of construction and the difficulties which arose during the period of the exhibition. I would, however, clearly impress upon you that the architects concerned were briefed with the clear understanding that the buildings had only a short lease of life, and they were often severely restricted in their budget.

Mr. Lobb then made the following comments while showing slides:

One of the first successes we can put down to the Festival was the transport and planting throughout the Exhibition of large trees. Many of them were 40 ft. or so in height and they are still living. It may well be that in our new towns we should carry out a measure of accelerated landscaping of this kind. One of our first duties at the first meeting of the Architecture Council of the Festival was to authorise the ordering of these trees in the early days of 1948. That gives some idea of the preparation that is involved. These trees have to be root-pruned in two successive years to enable them to be uprooted and moved to their new site. If that work is carried out beforehand, they can grow quite successfully.

In the Fairway (Fig. 1), approached from the County Hall end, were tubular welded structures which were filled in with panels of canvas, purely as a decorative screen to hide Waterloo Station from the site. This is a typical example of the charming use of welded tubular work in the exhibition.

The diamond shaped paving caused us a lot of trouble. The occasional light electric truck going over the pavement to clear up garbage or deliver to the post office or kiosk counter caused a large amount of cracking on the corners. It is certainly a shape to avoid.

One of the troubles we had on the South Bank was the bedding down of the precast concrete slabs forming the steps leading to the Dome of Discovery. Perhaps because they had a lot of use they were constantly coming loose.

Throughout the Exhibition we used a combination of concrete and asphalt paving, and the whole of the fairway was in asphalt. One of the troubles was that, even with the small amount of sun we had in 1951, the legs of the seats sank into the asphalt; this caused a certain amount of difficulty in that ladies in high-heeled shoes tripped up in the holes.

I ask you to cast your minds back to the

Above: Fig. 3. Welded light steel framing of the Power and Production Building on the South Bank. Right: Fig. 4. Glass façade of the end of the Power and Production Building

elegance of the balustrades which were used on the South Bank. Those in the Regatta Restaurant (Fig. 2) were typical in their lightness. The staircases in this particular instance had a centre spine with cantilevered hardwood treads, not an altogether successful detail.

Since this type of staircase seems to be very fashionable with students, I would mention that we found some of the more elderly people objected to walking up this open-tread staircase—not on grounds of morality, shall I say, or anything of that kind—but because they were nervous of heights, and they found walking up a staircase where you could look right through to be a great hazard to them.

The Power and Production Building showed the use of exposed aggregates in concrete blocks. In one part, concrete slabs of exposed brick aggregate were built in broken bond; the effect of texture and weathering was very successful. The external cladding on the first floor level was of precast concrete panels, some of them having exposed aggregate in certain sections in order to break up and give texture, the others having a plain finish.

The same building also had a considerable amount of welded steelwork (Fig. 3); the illustration shows the lace-like quality of this framing. This quality in welded tubular steelwork was carried to the *n*th degree in an emergency escape staircase from the upper gallery. The roof structure had a big span (Fig. 4), approaching 60 ft.

Here I would like to throw out a word of warning on one of the fashions in architectural design—the placing of large sheets of glass adjoining doorways. The illustration shows pairs of doors with sheets of glass between them. We had twelve serious accidents at the South Bank due to people walking through solid sheets of glass instead of through the doors. Several of these were hospital cases. I was a little disturbed recently to see that in one of the new schools the same fashion had been followed. It is a very dangerous one.

The Fairway Restaurant roof (Figs. 6 and 7) was structurally very interesting indeed. This roof was made up of a series of concrete planks with continuous holes through them, through which cables were threaded. They were then jacked up by the Freyssinet system of post-stressing. At the bottom edge of the picture can be seen the jacks and the wires just sticking out.

In the Transport Building again a light airy structure was attained, using normal rolled sections. The roof itself formed a space frame without any ties at the eaves level. The large opening window was electrically operated, but due to our climate and the fact that when it was open and there was any wind the aeroplanes started to move round, it was used and opened very seldom, but it was a nice idea.

In the Thames-side Restaurant (Fig. 8) the roof is of a sandwich construction, made up of two 16-gauge sheets of aluminium filled between with granulated cork, bedded in bitumen, and is a proper slab; what I mean is that the granulated cork is not a loose in-filling. The problem of the design of this roof is that it is cir-

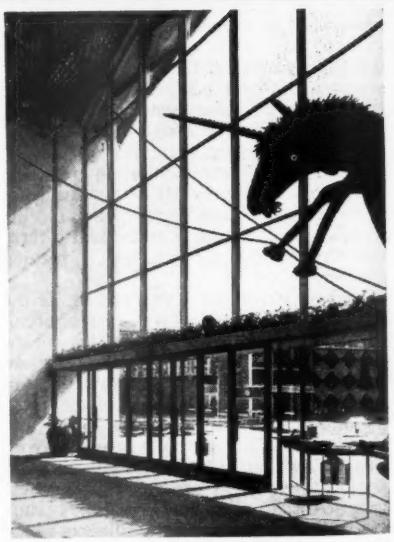


Fig. 5. Doors and glass façade of the Lion and Unicorn

cular—corrugated, that is, on a curve on plan. We had some considerable difficulty in fitting the joints to abutting slabs because it was necessary to drill right through and rivet the slabs along the ridge line. Looking at this building a few days ago—it is one of the few which have not been pulled down—I was sorry to see it is weathering badly. It seems as though this type of construction, which has un-

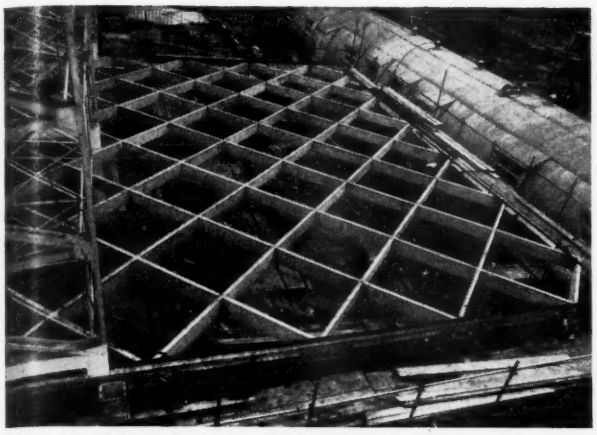


Fig. 6. The Fairway Restaurant roof under construction

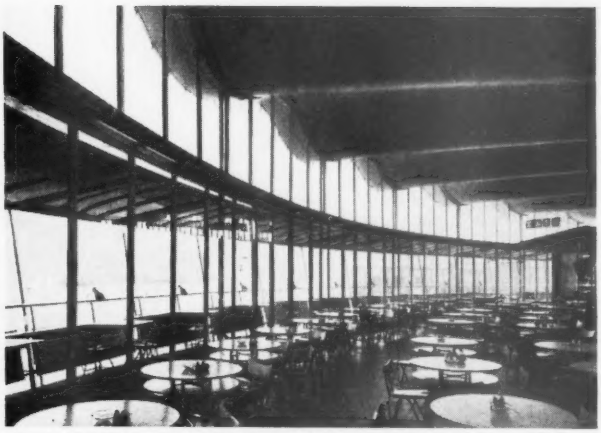


Fig. 8. The Thames-side Restaurant has a roof of aluminium and cork sandwich

Fig. 7. Soffit of the Fairway Restaurant roof, made of post-stressed concrete planks

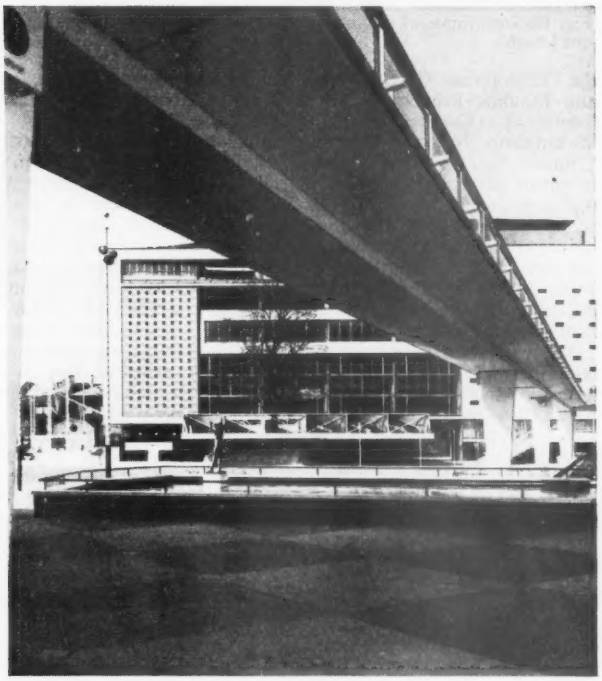


Fig. 9. The prestressed concrete footbridge and paving

doubtedly great possibilities, requires quite a different arrangement for the jointing of slabs.

The bridge (Fig. 9) is, of course, well known if only because the destruction and loading tests have been widely illustrated and reproduced. I think it is a very elegant structure indeed.

The paving in the foreground has really stood up very well indeed to the London dirt and grime. It is laid in bays of about 10 ft. square, a colouring agent being added to the darker sections. The aggregate was exposed by being tamped on to the top of the concrete after it had taken its initial set. Possibly because of the traffic and weather, it is now getting a little slippery, though it was not intended that this paving should remain. But the general texture is very commendable if that objection can be overcome.

The central spine staircases at the end of the Transport Pavilion had the treads cantilevered from them. These treads were precast. The full load likely to come on to them from the dense crowds of people leaning on the balustrades, which are supported from the end of the tread, was perhaps not fully realised. We had some cracking down the centre spine of the staircase, and again, probably because of their novel form and the fact that they were open, a lot of people objected to going up them and thought they were not safe.

In the Lion and Unicorn building (Fig. 5) we had some initial trouble with the weatherproofing of the large windows, with their very thin glazing bars (they were some of the largest sheets of glass I have ever seen); but that might well have been a result of the abnormal weather. With a certain amount of attention they stood up quite well.

The development of light and prefabricated steel sections for schools and other similar types of building has been pioneered most successfully by Mr. Aslin, and this has been taken a stage further by

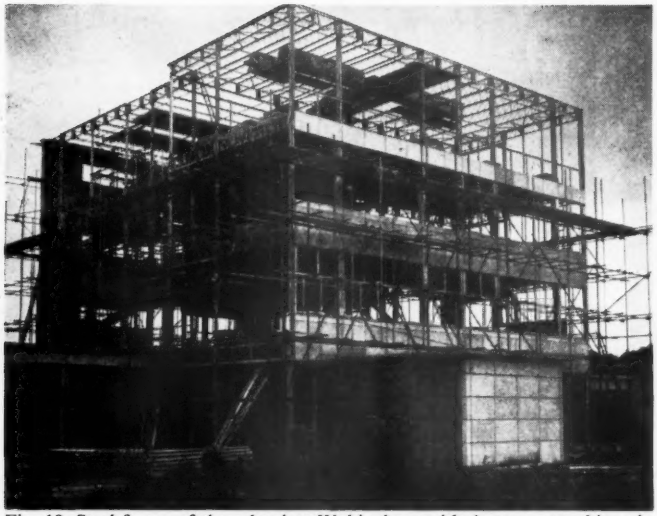


Fig. 10. Steel frame of the school at Wokingham with 4-storey stanchions in one length

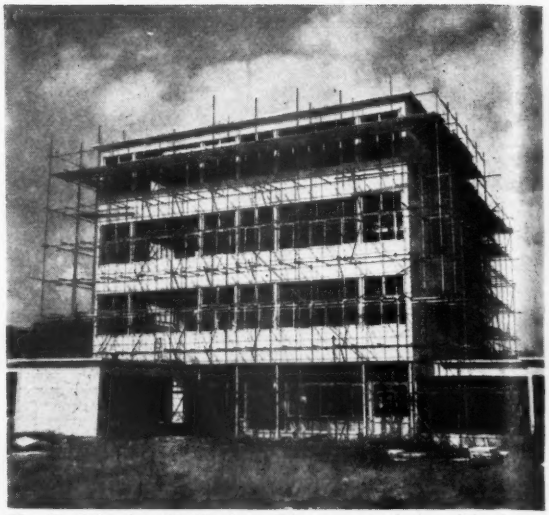


Fig. 11. School at Wokingham. The concrete facing slabs fixed

the Development Group of the Architects and Building Branch of the Ministry of Education in the erection of the school at Wokingham for the Berkshire County Council. Fig. 10 shows the steel framing in which the stanchions were delivered in one length to the site. As to the wisdom or economics—call it what you will—of having a stanchion delivered in one length for four storeys, I am not prepared to argue. But you will agree that it is a most interesting example of new technique in light welded structures.

The external facing slabs used on this building (Fig. 11) are based on a module of 3 ft. 4 in. and are 4 in. thick. Their overall height has been designed to allow the architect four different storey heights.

Quite a new development, to my way of thinking, in this building is the use of open lattice girders for threading through the services of the building. The heating pipes and the main electric cables and the tinned copper braided cables are threaded through the lattices and then drop down on small hangers to the boxes for the light points. I am told that this system has been developed after a considerable number of experiments and tests on the earth continuity system which is presumed to exist in a normal conduit; these braided cables have a separate earth wire in them. It does dispense, of course, with the conduit, saving a bit of steel and enabling one to bring the cables in and around corners which the conduit would not allow. This is a very interesting technique, but I have heard electrical engineers talking about the deterioration of cables and particularly of the heating up of cables which can occur. I should very much like to know how it will stand up to the test of time.

I have referred to the type of precast concrete slab used at Wokingham and I should now like to look back to the prototype which has been in use for some four or five years. I am tempted to the view that the principle of utilising slabs as horizontal planks, involving a considerable number of both horizontal and vertical joints, is not the answer (Fig. 12). This particularly applies in industrial areas. I am not saying this arises at all in the balmy and clean air of Hertfordshire. With the dirt, dust and grime that lodge in those joints there is a lot of streaking of the external finish according to my observation.

A different method has been used in the Five-Fifty Building in Miami, Florida, where they have a similar type of slab but in complete storey heights (Fig. 13). The joints are pinned in the structure purely vertically; Fig. 14 is a detail of the joint; a tempered aluminium strip is fitted between the two slabs with a caulking compound; the joint on the outside face is open. This must surely be a fairly quick way of erecting the slabs.

Most of this slab construction has exposed aggregate finishes which limit the possibility of crazing and cracking, or at any rate prevent these defects being seen except by most minute inspection. This form of surface treatment has been used on a number of buildings. The blocks of flats at Holborn and St. Pancras, by Hening and Chitty, using precast concrete panels with a brick aggregate, have weathered well; their general finish compares favourably with the more normal concrete structure.

One interesting point is that the structural concrete work at Holborn was treated with a cement paint, Snowcem, whereas at St. Pancras it was left completely natural. The difference in the two buildings is interesting to observe, particularly bearing in mind the constant maintenance which would be necessary to renew the treatment which was carried out at Holborn. Fig. 15 shows a detail of the brick aggregate panels.

Fig. 16 shows a mock-up of a panel which it is proposed to use on the ends of the Dartford Technical College which has been designed by S. H. Loweth, County Architect to Kent County Council. With the combination of colour, texture and pattern, it can be a very interesting treatment, and it should weather well.

Sand lime and other similar unfired bricks are being used in increasing quantities, accelerated by the utilitarian standards of finish which are forced on us by the economic position. In almost every job where I have examined these bricks *en masse*, drying shrinkage has occurred, causing unsightly cracks which are difficult to deal with subsequently. In my own experience this can only be controlled by most rigorous attempts to keep the bricks dry, both before incorporation in the work and after, and by providing vertical expansion joints in long lengths of walling. In a contemporary journal some detailed consideration was recently given to the design of expansion joints. In America they make a detailed study of this and provide for them in almost every building, partly because of the wide range of temperature. I was most interested to note not only the detail which had been adopted in the Hatfield Technical College, where an expanded rubber strip has been used between lengths of walling and the structural frame, but also the bond which had been used; this recognises the fact that the wall is purely an infilling. Mortar mixes for this type of brickwork are of very great importance and I wonder how long it will be before the contractor and the operative both realise that very considerable harm can be done by using too much cement. The quality of cement in this country has improved very considerably in the last ten to fifteen years, but the specifications for the mixes in both mortar and concrete work are still pretty much the same.

Whilst touching on cement, I would like to see a much greater understanding by the architect of tests on concrete work. Scientists and our engineer friends go to great pains to develop systems of construction giving us the small thin members which we require, but in far too few cases do the

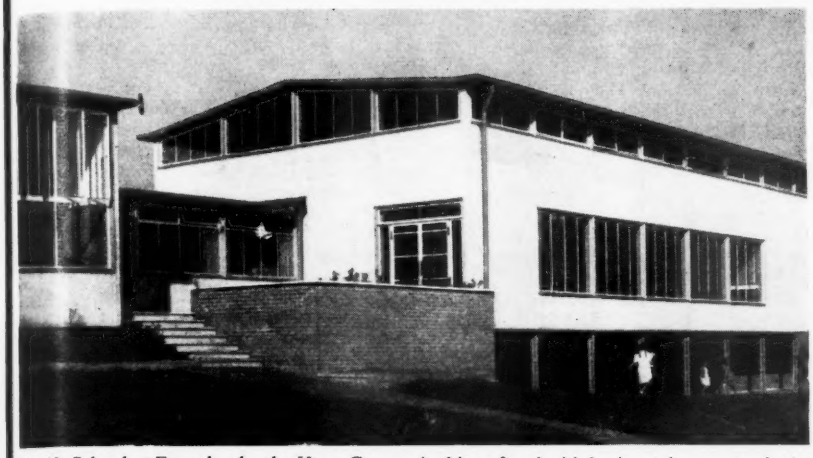


Fig. 12. School at Essendon by the Herts County Architect faced with horizontal concrete planks

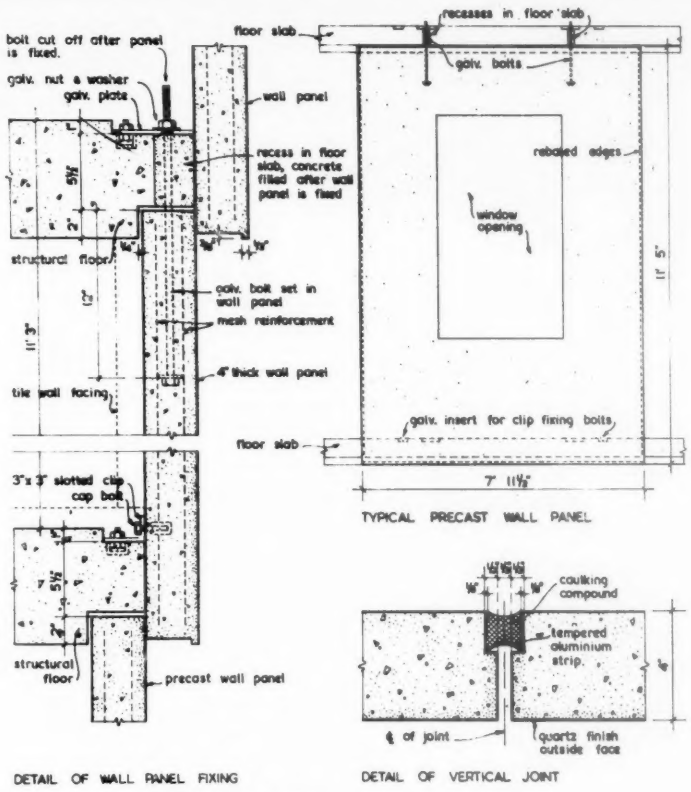
Fig. 13. Concrete storey-height slabs at Miami

clerks of works and contractors understand the essential need for the most accurate grading of the aggregate and such tests as bulking of sand and keeping a close control on the slump of the mix. I was interested recently to witness a test by a supersonic testing machine developed by the Road Research Laboratory where large concrete members can be tested in-situ by sending high-speed pulsations through the concrete, which are recorded by a receiving pad and a cathode-ray tube. The denser the concrete the more quickly the signal was transmitted, and by means of standard measurements it was then possible to assess the strength of the concrete within fine limits.

I should now like to refer to the use of glass. The principle of the manufacture of glass is lost in antiquity; it is probably one of the oldest manufactured materials which is now produced from practically the same ingredients as it was in ancient times. Considerable technical development has taken place in the last few years and today mass production methods make it available in a diversity of forms to suit pretty well every requirement. One particular reason for referring to glass this evening is that it is almost the only building material which has not substantially increased in cost since the war, and I wonder, therefore, if some greater use might not be made of it.

Glass was first produced from a disc from which comparatively small panes only could be cut, thus limiting the actual size of glass in the window pane, but not, of course, the size of the window itself. Today plate glass is manufactured in the form of a continuous ribbon which is 80 in. wide and is drawn out at the rate of five miles a week, the only limiting factor of the size of the sheet being transport of the window itself.

The largest sheet of polished plate glass in the world was erected in the Power and Production Building on the South Bank and it was just over 50 ft. long. The problem of moving this from the works at St. Helens at 4 miles per hour with police outriders, arranging its reception and placing it in position on the first-floor gallery of the building could almost be the subject of a separate talk; and, once experienced, would certainly put anybody off trying to use a window of this size again!



THE FIVE-FIFTY BUILDING, MIAMI, FLORIDA.

Fig. 14. Detail of storey-height slabs in the above building at Miami

Ingenious methods were adopted by the manufacturers for lifting the glass. A standard fitting is used consisting of a series of suckers which are held to the glass by a vacuum plant, but this was the largest edition they have ever had to make. The glass was then fitted into an aluminium frame designed most interestingly by Mr. Samuely which took account of expansion and contraction.

Taking the Ministry of Education Building Bulletin as the basis of assessing cost, you will see that the combined price of glass and metal window and door is considerably less than the price of the adjoining structural wall, and although I am not suggesting that we should live in glass-sided

boxes, there is undoubtedly a great beauty in glass as a building material if it is properly dealt with. Perhaps we have something to learn from the Lever Building in America, where the whole front has been lined in glass and where provision has been made for an electrically operated cradle which can travel up and down the mullions of the building, enabling the cleaning of the windows, the glass panels and the mullions to be done easily and regularly.

Far too little has been heard in this country of the economics of double glazing. The Carda window has been used on several projects and a double glass unit is now in production. I believe that in a recent school building the heat loss figures showed that the use of double windows enabled the initial cost of the heating plant to be reduced almost to the increased cost of the double glazing, and taking into account one year's saving of fuel this would certainly be the case. I feel there is scope here for a detailed study in which the architect, scientist, heating engineer, and window and glass manufacturers should all play their part.

The use of glass in the Royal Festival Hall on the South Bank is well known to most of you, but perhaps you may not all know that thick polished plate glass in the windows of the upper foyers adjoining Hungerford Bridge reduces the airborne sound to such an extent that one can see the trains whistling past a few feet from the window and yet hear nothing (Fig. 17).

I mentioned earlier one scheme in America for washing down buildings, and I wonder why we as a profession do not try to do more about the terrible problem of the pollution of the atmosphere by smoke which brings in its train so much deterioration of our buildings. This winter, with its persistent fogs followed by a considerably increased death roll, has surely brought home to everybody how wrong it is to allow this enormous wastage to occur year after year; and I think it is incumbent upon every architect in every job to use his utmost powers of persuasion to see that fires and equipment are installed which minimise it. Deterioration of the structure can be guarded against by the provision of proper washing facilities, coupled with attention to the detailing of sills, overhangs and the like; thus preventing the stains and streaks which seem to be the fashion in buildings of recent years. The work done by B.R.S. and the R.I.B.A. before the war on this seems to have gone into cold storage and is certainly worth while reviving. I wonder if James Woodford, the sculptor, really intended the figures which grace the entrance to this building to have permanently sooty armpits; and surely the black tears weeping down from the carved inscription 'Royal Institute of British Architects' are not an expression of our feelings in this Coronation year?

A most notable development in recent buildings is the bold use of colour, both for interior and exterior finishes. The recent schools in Hertfordshire are a notable example of this development.

Fig. 18 shows a use of colour in the entrance hall of an infants' school at Ramsgate. Coloured thermoplastic tiles in the floor comprise nautical motifs of one kind and another. They give considerable delight to the infants at this school.

In closing I should like to refer to the general question of the design of details on buildings, particularly housing and schools. Architects might, I think, often pay more heed to the time factor and help to obtain greater productivity by, first, choosing materials that are readily available; and, secondly, with the complete co-operation of the contractors, putting over to the men on the site the story of what they are doing.

On the South Bank we had five strikes and over fifty disputes which were referred to the Tribunals. Most of the disputes were due to the novel forms of construction and the uncertainty as to whether a new material should be fixed by bricklayer, plasterer, tinsmith or plumber, or whether some completely new trade had to be invoked, presumably with a special Union to look after it. In the last few months of the job, by means of talks and exhibitions and by inviting the men's delegates to attend at some of the progress meetings, we were able to put over the whole job to them. If you were to ask me if there was any one particular event which helped to get the buildings finished to time, I would say it was the week-end visit arranged during the last two months of the contract for the men's families; the subsequent improvement in morale and the diminishing of labour troubles were particularly noticeable.

I have certainly tried, by displaying models and perspective drawings in the workmen's canteens and by talking on the site, to interest them in the job they are building; and I am quite convinced that it has been half an hour well spent. This view is not always shared by the foreman, who tends to take the view that the only thing the chaps take any notice of is their pay packet. I don't agree with this, and feel much more could be done which might very well have an appreciable effect on productivity. This is a new technique which is still in embryo.

DISCUSSION

Mr. R. C. Bevan, proposing a vote of thanks, said: I should like to comment on the functional aspect of these new techniques. The success of a new technique in building depends on the proper appreciation of the functions that the new system has to perform.

We are all accustomed to the old techniques, and we know that they are going to be quite adequate when the building is up. They do go wrong occasionally, as we at the Building Research Station know full well. But in dealing with a new technique one has to study very consciously the functions of the particular part and assess its performance in respect of each of those functions.

There was a very interesting functional requirement in the Dome of Discovery, which was thought at one time to be likely to give trouble. The Dome was consciously considered from the point of view of excluding solar heat. With the brightly polished surface of the new aluminium, it was felt that no trouble would arise. But someone thought suddenly that London was a dirty place, and the grime would increase the absorption of solar heat, with the result that the interior would become almost unbearable. The question then arose as to what could be done to preserve that bright surface, not necessarily from the simple deposition of dirt which would, of course, be washed away, but from the corrosive effects of the depositions on the aluminium itself. It was suggested that a coat of varnish should be applied to the metal, but again the point arose that the varnish would affect the absorption of the sun's heat. Little items like that must be considered in dealing with a new technique.

In addition to the physical functions of a new technique there are many more aspects to consider. There is, for instance, the economic aspect, and that perhaps might be considered the ultimate criterion of any new technique. Then there is what I call the 'buildability', or, if you like a more everyday term, the practicability of it. It has not been unknown for new schemes to be put forward which are in fact quite impossible of execution. Thus the success of these new techniques does depend very much on a very detailed analysis of the various parts of the design. And when one considers for a moment the complexity of these functions, it needs much determination on the part of the architect to venture into the field of new techniques. We can quite understand those who do not venture into this field but prefer the old.

The new techniques have, up till now, had a rough time from bye-laws. One thing that can be said of the new bye-laws recently issued by the Ministry of Housing and Local Government is that they do clear the way for the new techniques.

Mr. Richard Henniker [*F*], seconding the vote of thanks, said: I wish to take up Mr. Bevan's point that many architects do not venture into the new techniques. It is probably true to say that of those who do venture more come from among official architects than from among the private practitioner. The official architect has a client who is perhaps not quite as articulate regarding successes and failures, and can therefore be relied upon to complain not quite as bitterly as the rather more personal client with whom the private practitioner has to deal.

The private architect has therefore very much less chance of seeing a lot of these techniques at first hand and gaining experience of them. He knows that they are being used, because he cannot fail to see them in the technical papers. That does not mean to say that he knows them. That is why this evening is so valuable.

Mr. A. R. F. Anderson [*F*]: On two recent occasions I came to hear Mr. Allen's paper on American factories and Mr. Peter

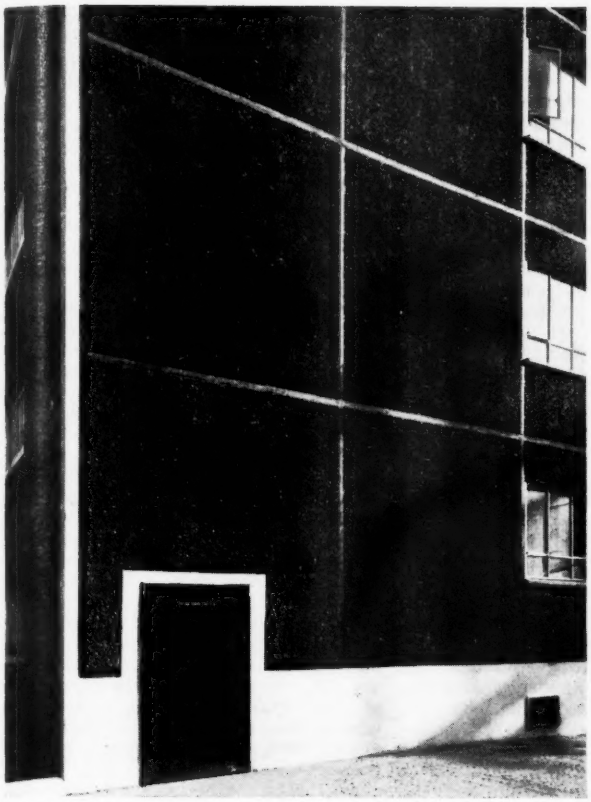


Fig. 15. Brick aggregate panels on a block of flats in Holborn

Fig. 17. Glass $\frac{3}{8}$ in. thick for noise exclusion on the Royal Festival Hall

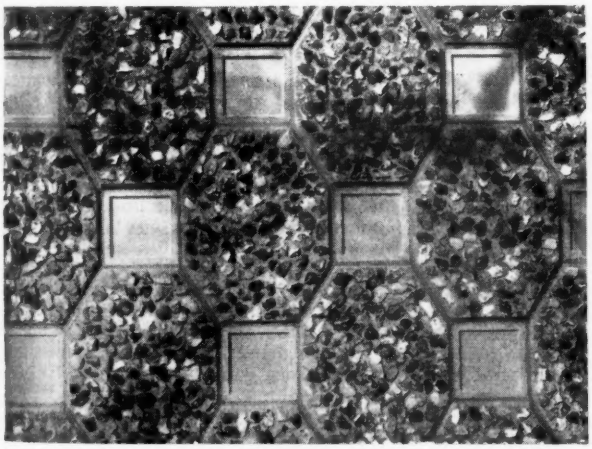


Fig. 16. Mock-up of panels to be used at Dartford Technical College

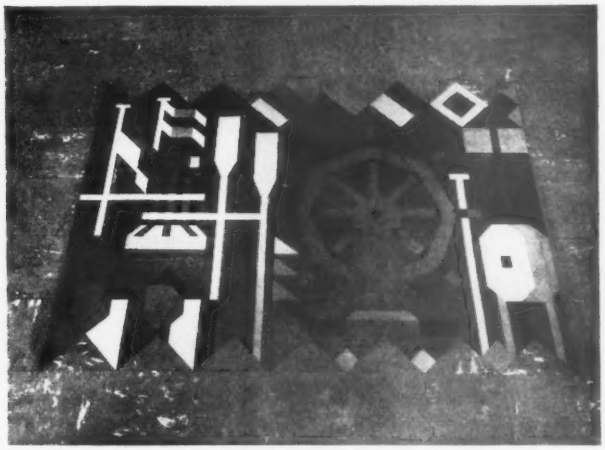


Fig. 18. Floor panel in coloured thermoplastic tiles in Ramsgate school

Shepherd's paper on what I would call gardening. There seemed to be a bit of both in Mr. Lobb's paper, and I now appreciate that trees are a very up-to-date building material, and that special treatment of them is necessary.

I am glad to be able to say, 'I told you so'. A few years ago when Mr. Howard Robertson was reading a paper on the American scene, I happened to second the vote of thanks. I then said, 'Yes, I like all these plate glass doors, but sometimes you will find them dangerous. I saw a shop in Fifth Avenue where they had had to stick adhesive tape on to the windows to prevent people from walking through them.' It appears that the South Bank boys did not read what I said!

Mr. L. Eckersall [*A*]: Was there any trouble at the South Bank with condensation with large areas of windows? You do get it with these window walls, and it sometimes spoils the internal finishes.

Mr. F. J. Samuely: I should like to ask Mr. Lobb whether he can make any suggestions as to how far new techniques

should be put into operation and how far one should be careful about them. This is always a very great problem. If one tries to do anything that is new or progressive, one can get up to a certain point in thinking out the consequences but there may always be something that has not been thought out properly. Then trouble may occur.

To take an example, the steps at the Transport Pavilion were obviously badly thought out. I think I am entitled to make that criticism, because I was mainly responsible for them.

We always calculate steps at a certain load. The normal step is supported at the sides and most people walk along by the balustrade. When a step is cantilevered, people walk away from the support. Therefore it turns out that one should really calculate cantilevered steps at a higher super-load than steps supported at either end. No one thought of that at the time, and reinforced concrete was not the right material, so this particular scheme was a failure. Very often failures occur, not necessarily collapses, but cracks, as in this case.

Mr. G. D. Nash [*A*]: I am not so worried about the possibilities of condensation in the summer conditions of the South Bank. I am more concerned with buildings with high humidity conditions—winter conditions—and with glass-fronted buildings which are not left with a sheet of glass but may have to be backed on the inside with some form of thermal insulation construction. One is then reversing the normal construction and one would have to design for the prevention of condensation troubles.

Has Mr. Lobb any views or experience on the incidence of condensation in such glass-faced structures, not in the construction of the windows themselves but in the wall construction when it is backed with some insulation material? This also applies to metal-faced panels.

Mr. John Ratcliff, O.B.E. [*A*]: I should like to stress Mr. Lobb's point about climate and atmosphere, because we tend to be led away by the wonderful pictures of buildings in Europe in full sunshine. On the South Bank, also, we always looked upon the sunny side and forgot that in this country most days are overcast and dreary. We tend, too, to rely too frequently upon the paint pot. Details of the buildings on the South Bank are published in the technical press and people tend to accept them too easily as a pattern-book for more permanent buildings.

We have to adapt ourselves to our climate more than we have done hitherto in this regard, particularly in cities. Here I should like to make a personal appeal. I deplore the cleaning down of the normal type of building, because I feel that is using traditional materials in the wrong way. By all means let us have our glass buildings and clean them regularly. But in the sooty atmosphere we have in London and elsewhere we should let the building go dirty.

Mr. Maurice Jay [*Student*]: Washing down buildings is seldom done in this country except when they get into a really filthy state and need to be scrubbed down. When St. George's Hospital at Hyde Park Corner, which is stucco and painted, was repainted some time ago, within a matter of weeks the shocking atmospheric pollution of London had already dulled it. Would not the application simply of a hosing down with the windows tightly shut have a tremendous effect not so much in making it cleaner but in washing away the sulphur which eats into the paint? I should be very grateful if Mr. Lobb would tell me whether a building of perhaps four or five storeys would stand up to the pressure of a hose.

On the question of glass as an external finish, I know there is a certain amount of feeling that contemporary architects are using it for the sake of using it, because they like it and for the fun of it. We should remember that it is in dull countries which get very little sunshine, like our own, that the largest areas of window are needed. In some of the hotter and semi-tropical climates the window areas are usually cut down to the barest minimum.

I was glad that Mr. Lobb mentioned the relatively low cost of glass, or at least the fact that it had gone up very little in price compared with other building materials. I believe sheet glass in reasonable areas is one of the cheapest impervious sheet materials that we possess, and its use for external cladding should not be lightly brushed aside.

Mr. E. L. Bird [*A*]: May I produce a small piece of evidence on this question of the washing of buildings? The Goldsmiths' Hall has been washed regularly for the Goldsmiths' Company by the London Fire Brigade for many years. The last speaker may be interested to know that they wash it with fire hoses in the ordinary way, shutting the windows. Also, I would ask Mr. Ratcliff to look at the Goldsmiths' Hall to see whether he would not change his mind about the desirability of washing Portland stone buildings; I think he would.

Mr. Richard Henniker [*F*]: I understand that Cambridge has been divided into two camps by the cleaning down of the Senate House, which is now so white that even on a comparatively dull day you need sun glasses to look at it. It is quite surprising how dreadful it looks. I would put in a plea for regular washing down, but not too rigorously.

Mr. Tom Page: May I be allowed a few reflections on a special aspect of this problem, that of training? I myself am not an architect. I teach science in a school. It seems to me that a lot of failures of modern techniques come from a failure in the scientific training of architects. I find people who, in the schools, think of going in for architecture are the people who seem to lack technical ability. There seems to be a tendency at the present moment to believe that architecture consists mainly of drawing pictures, and seemingly the techniques involved are not fully appreciated.

Propaganda in schools to emphasise the technical side of architecture, as well as the aesthetic side (I do not want to divide it into two camps), would lead to a great improvement in the technical standards and the new techniques in this country.

Mr. E. D. Mills [*F*]: I was interested in Mr. Lobb's comments about continental buildings which are to some extent copied here. On seeing some of them, I was particularly impressed by the fact that in spite of the more temperate climate and the reduced amount of pollution that arises in places like Switzerland and Sweden, far greater trouble and care had been taken in the detailing, even when the conditions were not as severe as we have here. It started me on my own line of interest.

Obviously detailing of that sort must cost more in the first place, but the saving on maintenance costs must be tremendous over the normal life of the building. It is a matter of great importance, this question of detailing. If we can persuade our clients that a little more money at the capital investment stage is a real investment as compared with the saving of maintenance costs during the years it will be a good thing.

I was interested to read in the ARCHITECTURAL ASSOCIATION JOURNAL a paper by H. Conolly, Essex County architect, pointing out the very high maintenance costs of school buildings and the problem with which county authorities are faced in maintaining them where detailing has not been properly considered.

Another point of interest is light steel construction. I prefer to call it steel knitting. The principal difficulty I find with it is that it is far more expensive than ordinary structural steel and costs a lot more to paint. When you have to paint it the next time it costs even more.

There is a tendency to use new techniques for the sheer fun of doing it when they are suitable and when they are not suitable for particular buildings. Steel knitting is a case in point. I have seen it done in buildings where a high dust hazard arises. Very beautiful open lattice trusses make a wonderful place for collecting dust. In the same way, shell concrete was badly misused in its early days and still is in many cases. I am afraid prestressed concrete will also be misused, simply because of this love of using new techniques for the fun of doing it.

One of the things we found on the South Bank was that a lot of our colour was not nearly strong enough to stand up to outdoor conditions; it faded quickly. It was depressing to find so many colours that were strong and bright enough when they were applied within a very short time faded badly. Is there any real answer to this?

Mr. Harald Weinreich [*A*]: I wonder whether there will be any advance at all with double glazing in this country as long as, in the first place, the detailing of the window frames is not given more attention. It would probably be waste of money to use double glazing, hermetically sealed, and have only a single rebate with all the air going through it.

I believe that the question of increasing building costs and reducing maintenance is tied up with the peculiar taxation problem which arises. You keep your initial capital outlay as low as possible and you get your maintenance allowed in expenses. I am talking, of course, of commercial buildings. Possibly apart from the building licence question, in normal times they try to spend as little money as possible and theoretically promise to maintain the building, but of course it is not maintained and it deteriorates.

The Chairman: I should like to thank Mr. Lobb for not once using the word 'prefabrication', which has a nasty tang to it. It has been tacked on to what are normally called 'prefabs' which are normally accepted as being substandard houses, certainly by the laity—something which you have to do now because you cannot afford anything better.

Mr. Lobb's point about co-operation with labour is of extreme importance. If labour knows what it is doing and what it is for, there is a tremendous response. I have found it in all kinds of ways. When I first started to use colour, which meant instead of gallons of cream paint all over the place a large variety of colours in relatively small pots, the people who made the paint thought they were dealing with a stupid architect who did this to make things awkward. Why couldn't he have gallons of the same colour? With the manufacturers' approval, we arranged a trip and took two bus loads of men down to the finished jobs where their paint had been used. When they saw the result, with children in school obviously enjoying and appreciating it, there was no more trouble about half-pints of paint. That could be extended. I have done it in all sorts of trades, and there is a great response if the man knows what he is doing, what he is doing it for, and what is the result.

Perhaps I might be permitted to mention a rather heretical comment by Mr. Henniker about official architects having easy clients. No greater mistake could ever be made. There are such a lot of them, and you cannot ignore the lot. It is perfectly true, however, that an official architect has more opportunity of using new techniques than a private one. If you build twenty schools a year you can afford to take a few chances. If one goes wrong, it is only one-twentieth of the lot.

Mr. Lobb: Mr. Bevan's point about the glare on the Dome reminded me of a frantic telephone call we had from British Railways that the train drivers coming out of Charing Cross could not see the colour light signals because of the sunshine reflected off the dome. What were we going to do about it? Of course, with the masterly inactivity that can happen in a Government department, we let the weather do it, and in about three days the problem no longer existed!

Mr. Eckersall touched on condensation, and he was largely answered by a subsequent speaker. In exhibition buildings you have large doors, the traffic of people, the constant circulation of air, and reasonable ventilation. We did not, in fact, get any condensation from the inside of the glass surfaces at the South Bank. When we were struggling in the worst weather, I think for eighty years, when it did nothing but rain on us just before the opening, the very high humidity did cause a lot of trouble and it slowed down painting operations and work of that kind. But after we had got out of the bad weather, with the ventilation and the constant moving of traffic we did not have any more trouble.

I brought in glass largely because it is cleaned easily, being completely impervious and highly polished. Possibly if we cannot do anything about smoke pollution we ought to do something about buildings that can be easily cleaned.

Mr. Samuely raised a very interesting point as to how far new techniques should be put into operation. He and I separately and sometimes together have tried a number of them. I thought it was largely going to be answered by my saying it depends whether you are a county architect or a private architect. Mr. Aslin has answered that question himself. It is the size of the programme which is available to the county architect. It is obvious that you have to take the best possible advice from the Building Research Station and then try the thing out in small areas and judge from the results. You have to try those experiments before doing the thing in a big way.

Mr. Nash raised the question of internal condensation, and I want to plead partly the time factor and partly that I am not a high-powered scientist to say that without further time and observation I have frankly not the answer to this question. It is certainly a problem that might very well arise on some of these sheet materials of low conductivity. You do, in certain weather conditions, get condensation on the inside of the sheet materials. It is a fact, I believe, that in steel houses, for instance, the whole of the inside of the steel cladding is painted with a bituminous asbestos compound not unlike the stuff put on a new motor car to protect the sheet metal. That to some extent prevents condensation. Perhaps some of the vermiculite materials would help to some extent.

Mr. Ratcliff commented on climate and atmosphere and repainting costs. I myself was going to mention the point that Mr. Mills mentioned—Mr. Conolly's paper where he commented on the fact, as did Mr. John Stillman at a symposium at the Architectural Association, that the average time for painting the interior of a school building is every seven and the exterior every five years. These conditions presuppose a pretty good specification in the first instance. With the economic difficulties, licensing, and so on, it does not always happen. The question of saving capital cost and putting it on maintenance is a very difficult one. So often, as we all know, maintenance is not done.

Mr. Maurice Jay commented on washing down buildings, and I agree with him. There are many reports in the library going back to 1929, and I looked at some of them this afternoon, including some very interesting photographs produced in consultation with the Geological Museum. They show the effect of smoke pollution and the washing down of buildings. If Mr. Henniker would look at the Goldsmiths' Hall, to which Mr. Bird referred, he would probably agree that the regular washing down of a building with plain water is very desirable. It gets off the soot and sulphur which can do so much harm to the structure. The Cambridge buildings have been scrubbed to such an extent that they are probably whiter now than when they were first built. That is quite different from cleaning off the accumulation of soot which, mixed with water, forms into a weak solution of sulphuric acid and eats its way into the stone, causing all kinds of problems.

Mr. Page commented on the scientific training of the architectural profession. That is a very wide subject and it cannot be tackled in the time left to me. I do not think he is entirely right. There is a lot of science in the five years taken up by the architect's training. As to whether or not it is possible for the student completely to assimilate it, with all the other things he has to deal with, is perhaps the main point.

Mr. Mills referred to lattice trusses. They can be most interesting, particularly when developed in the form of space frames dispensing completely with the tie bar at eaves level. I have in my mind a dining hall which is being built at present in the north where there is a most charming general effect and where the cubic content of the building has been appreciably reduced over what would normally be the case without any feeling of oppression due to the complete openness of the roof spaces. So far as the painting of these trusses is concerned, if you are going to have that kind of framing anyway—assuming you have a steel frame in mind, whether rolled steel or tubular and welded—what is easier to paint than a collection of tubes and quarter-inch rounds?

I am not a chemist and I do not know whether there is going to be any answer to the use of strong permanent colours. It may be that the synthetic slab materials such as I saw being used at Borehamwood school under Mr. Aslin's direction might be the answer to some of the colour problems.

I agree that if you are going in for the trouble of double glazing it is very desirable to have double rebates as well, and possibly to do something about pushing the rebate back against some material like latex rubber so that you get a positive seal. That is carrying the thing to the *n*th and is probably not possible in the ordinary run of work in housing and schools that we have to do mainly nowadays.

I did not consciously avoid the use of 'prefabrication'. It is probably that I dislike the word as much as the Chairman does. It has such an unfortunate association, rather like the word 'planning' in the layman's mind. He is sick and tired of it. It is probably better to avoid it.

Review of Construction and Materials

This section gives technical and general information. The following bodies deal with specialised branches of research and will willingly answer inquiries.

The Director, The Building Research Station, Garston, near Watford, Herts. Telephone: Garston 2246.

The Officer-in-charge, The Building Research Station Scottish Laboratory, Thorntonhall, near Glasgow. Telephone: Busby 1171.

The Director, The Forest Products Research Laboratory, Princes Risborough, Bucks. Telephone: Princes Risborough 101.

The Director, The British Standards Institution, 28 Victoria Street, Westminster, S.W.1. Telephone: Abbey 3333.

The Director, The Building Centre, 26 Store Street, Tottenham Court Road, London, W.C.1. Telephone: Museum 5400 (10 lines).

The Director, The Scottish Building Centre, 425–7 Sauchiehall Street, Glasgow, C.2. Telephone: Douglas 0372.

The industrial rubber door, showing a truck passing through

An industrial rubber door. In factories and workshops where trucks and trolleys are frequently passing from one department to another, the usual wooden doors in dividing walls may well be a source of rather heavy maintenance in repairing the damage done by trucks and trolleys in passing through. Attempts have been made to solve the problem by providing opening mechanism operated by a photo-electrical cell, or by fixing buffer springs to the doors, but now a new kind of door has been produced that should answer most requirements.

Messrs. William Newman & Sons, Ltd., of Hospital Street, Birmingham, 19, in collaboration with the Dunlop Rubber Company, have brought out and patented a two-leaf door, swinging both ways, in which each leaf is composed of a horizontal and a vertical length of steel tubing welded together to form an inverted L, the angle being strengthened with a triangular gusset piece. A sheet of 5/16 in. tough and hard-wearing rubber, reinforced with canvas, is attached to the tubular frame between two sets of 1 in. flat metal bars, of which one set is welded to the tubing; these bars are riveted together through the rubber sheet. At the bottom the vertical tube rests on a pin set in the floor and at the top a pin rotates in a plate attached to the head of the doorway. Set in the top of the vertical tube is a special adjustable spiral spring which returns the leaf to a central position after opening. An observation panel some 18 in. by 6 in. is cut at an angle in the rubber sheeting and is fitted with Perspex in a metal frame.

In essence, therefore, the two leaves set in an opening are rubber curtains, and trucks and trolleys can be driven straight at them, the rubber is pushed aside, the doors swing open and return to place when the truck has passed through; or the truck can stop halfway through without damage to itself or the door. When closed the two rubber sheets overlap by an inch to prevent draughts, and it does not matter which leaf closes first as the overlap can occur on either side. Messrs. Newman are developing a device which will keep the leaves together when closed, in the event of a strong draught, without impairing their ease of opening.

At present the doors are made for a standard opening of 7 ft. 3 in. high by 5 ft. 9 in. wide, but openings up to 10 ft. by 10 ft. can be accommodated, and whitish rubber sheeting can be supplied in ½ in. thickness if required.

The advantages of this door are obvious for appropriate positions in factories, workshops, hotels, restaurants, hospitals and the like, as the rubber sheeting does not scratch or damage any vehicle passing through; there is no noise when closing and fingers—even if trapped between the sheets—are not crushed. Maintenance is of course practically nil.

The JOURNAL inspected the doors shown in the accompanying illustration, in which a truck driver is seen driving through without getting down from his truck.

Commemorating in Timber. The general spirit of warm-hearted and genial loyalty that will reach its climax on Coronation Day has evidently inspired the Timber Development Association to produce a brochure containing some suggestions for commemorating the event in timber, but although the illustrations are light-heartedly and whimsically drawn the subjects are quite serious and include flagpoles, lamp standards, park benches, commemoration halls, bus shelters, kiosks, window boxes, sports pavilions and the like, which might be erected by bodies wishing to mark the eventful year.

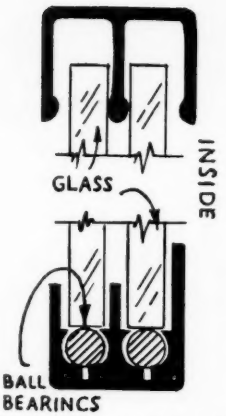
A somewhat cryptic remark says: "All these designs can be carried out in timber if used the right way", but it is to be assumed that this refers only to timber technique and has no hidden meaning relevant to modern design or the siting of the erections in the visual field. The drawings are by Mr. J. R. M. Poole [*A*], Chief Architect of the T.D.A.

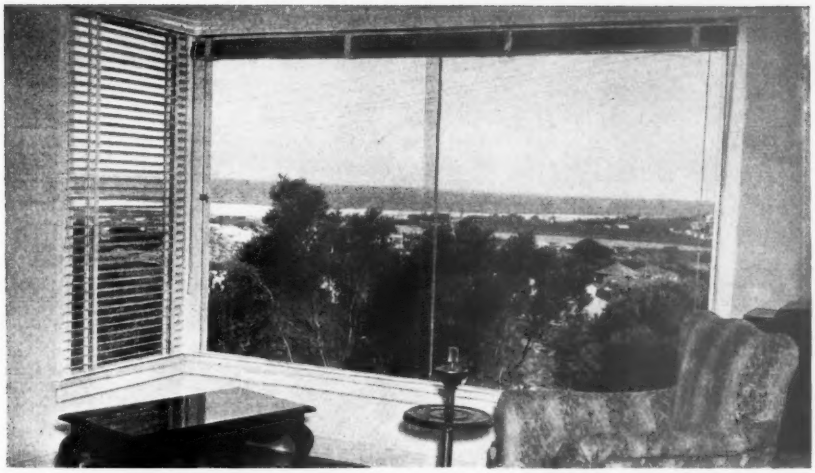
A New Sliding Window. For some years a window of a new type has been in use in Australia, but the idea is new only in its application to windows, as it is much used for sliding doors to cupboards and cabinets. As applied to a window the idea consists of a wood frame fixed in the window opening; to the top and bottom of the frame brass channels are fixed, the bottom one having two races in which stainless steel balls are placed and on them two panes of glass run, one in front of the other. The panes are of such a length that when closed they overlap each other by 3 in. The jambs of the frame are grooved ¾ in. deep to receive the ends of the panes when closed. Recessed finger pulls are provided and these are fitted with chrome plate brass inserts. On each side of the frame spring-loaded plungers are screwed to the woodwork, and when the panes are in the closed position the plungers engage in the finger pull recesses to prevent anyone opening the window from the outside.

It will be noted from the accompanying drawing that the inside leg of the bottom channel is higher than the other two, so that in the event of a heavy rainstorm filling up the channel the water will not spill into the room but will escape either over the middle and outer legs or through the weep holes bored through them. The clearance over the edge of the glass in the top channel is sufficient to enable the panes to be lifted out of the bottom channel and removed; replacement is similarly easy. Flat brass anti-vibration springs are fitted to prevent any possibility of the panes rattling. The glass recommended is ¼ in. plate.

Some of the obvious points about the window are that painting is required only to the frame, and this can be done from the inside; all surfaces can be cleaned from the inside; the question of rust does not arise; there are no glazing bars or other obstructions to vision; the effective opening of the window is practically half its length; moving the panes over the ball race should be easy.

For additional weatherproofing a clear plastic channel strip can be fixed to the edge of the inside pane, but it is considered that this would hardly ever be necessary. Experience indicates that no draught of any consequence gets through the 3 in.





The Allday sashless window. Above, details of the top and bottom channels. Right, an installation in Australia

overlap in the middle of the window. If desired, a transom can be fitted and ventilators—either of the sliding type or the usual type—may be put in.

The window is called the Allday sashless window, and is marketed under licence in this country by Messrs. P. G. Allday & Co., Ltd., of Northwood Street, Birmingham 3, to whom all enquiries should be addressed.

Quick House Building. Sir Robert McAlpine & Sons, in collaboration with the Hemel Hempstead Development Corporation, have recently carried out an experiment in rapid house erection by building two 2-bedroom semi-detached houses and three of the 3-bedroom terrace type to designs by Mr. Maurice H. Bebb [*L*]. The semi-detached houses were completed in twelve days and the terrace within fourteen. These times were achieved by organisation and design and were not a mere pre-arranged 'stunt'. The methods used deserve close study.

The foundations were of the usual strip kind, the trenches being merely filled with concrete which was roughly levelled. At ground level pre-cast concrete kerbs in long lengths and 11 in. by 6 in. in section were laid on the concrete and bedded level. The damp course was laid on this kerb which also formed a base for the walls.

The oversite 3 in. of concrete was then laid on 3 in. of hardcore, crack-control reinforcement being incorporated. The concrete was thickened to 9 in. to form a footing for the central chimney stack. At the same time external paths were placed, drains laid and completed, and easy bend stoneware pipes cast into the oversite concrete to take the services. Thus the whole of the site work was completed before the walls were started. It was at this stage that the timing of erection began.

Externally the walls were of cavity type with an outer leaf of 4½ in. brickwork with 9 in. by 4½ in. piers at openings and at intervals in the uninterrupted lengths of walling. In most cases these piers were not built into the walling but were bonded thereto by 7 in. square sheets of Exmet built into every third course, a bituminous felt d.p.c. being laid vertically to the back and sides of the piers at openings.

The inside leaf of the external walls and the interior partitions were formed of prefabricated Bellrock plaster panels which were 8 ft. high, 1 ft. 6 in. and 2 ft. wide, and 3 in. and 4 in. thick. (Bellrock panels were described on p. 135 of the February 1952 JOURNAL.) On a large contract these panels could be made to shape before delivery, but in these experimental houses any necessary cutting was done on the site.

The method of erection was to start with a panel at the corner of a room and to butt another panel against it. Two aluminium channel clamps were then fixed over the joint by means of a connecting link (which was later withdrawn) to allow liquid plaster to be poured in from the top, thus forming a homogeneous joint. After the supporting strips had been removed the joint was rubbed down and made good. A whole wall of panels can be erected before the joint filling is done. As these prefabricated panels are dried out before delivery, and have a perfectly smooth surface, decoration can be started at once.

Since the brick walling with its piers and lintels was load-bearing as far as the roofs and floors were concerned the 3 in. plaster panels were used only as an interior lining, forming a cavity 4½ in. wide between the piers. Where the centre partitions were load-bearing 4 in. panels were used.

In the semi-detached houses the first floor joists ran parallel to the front and back walls and metal tie bars were built into the brick walling and were screwed to the notched underside of the three nearest joists. At the party wall, which was of 11 in. cavity type, the joists rested in galvanised steel double shoes. On the outer ends of the houses the joists were carried on r.c. beams spanning between the piers. At or near mid-span the joists took a bearing on the Bellrock slabs with metal tie bars beneath to distribute the load. The first-floor finish is 1 in. t. and g. boarding. The ground floor finish is thermoplastic tiling on 2 in. concrete laid on a membrane over the site concrete.

The roof construction consisted of prefabricated trusses of Timber Development Association design which were hoisted complete and fixed in pairs. Between each pair pre-made purlins were fixed to take ordinary rafters, the whole roof construction being assembled without any cutting of timber on the site. The surfacing was of pantiles on reinforced bitumen roofing felt.

Time and site labour were also saved on the heating and water systems which were grouped around the central stack and prefabricated in lengths. Normally on a large contract these would be set up on jigs in the works and then dissembled for dispatch to the site. A Brook fire with a small calorifier was installed in each house for heating the living-room, the hot-water system and two radiators, and it is considered that this should adequately heat the whole house.

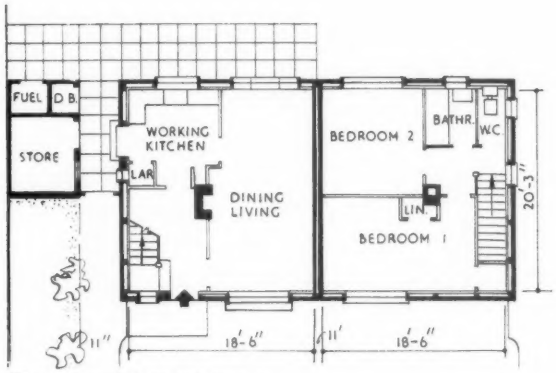
The waste plumbing was on the single stack principle with a prefabricated steel soil pipe and branches, so that it had only to be placed in position and connected to the various sanitary appliances. Normally it would be economical to have one soil pipe for each pair of houses, but with the five experimental houses this could not be done. Use of these factory-made soil pipes reduced the site labour of the plumbers to some twelve man-hours per house.

Prefabrication was also applied to the electrical system, the conduits, switch and plug boxes being cast in the Bellrock panels during manufacture. The electrical contractor had to supply a small metal connection box for each house with all the wires cut to length and coiled up; this box was fitted in between joists of the first floor and the wires were then threaded down the conduits to the switches and power points and were run along the ceilings to the lighting points; the whole work for one house being done by one man in about four hours.

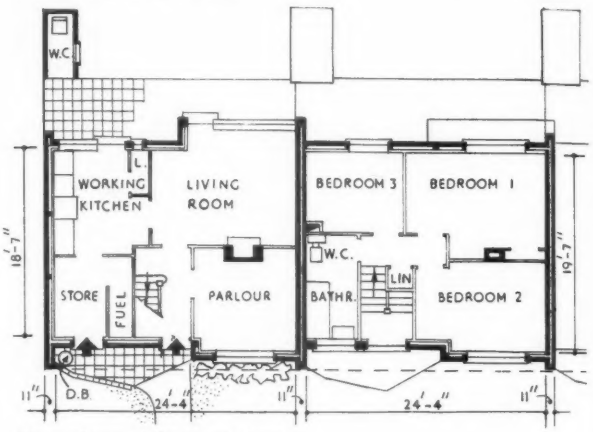
The window linings were delivered as complete units and the door frames came on the site with doors hung and furniture fitted. The ceilings were finished with Gyplith lath, skimmed only.

Hemel Hempstead houses. The start on 3 March

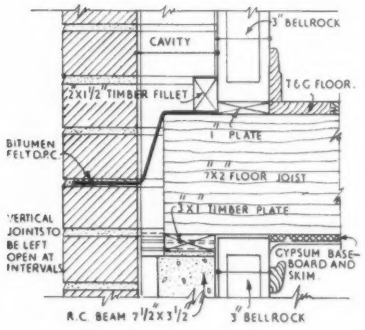
Completion on 23 March



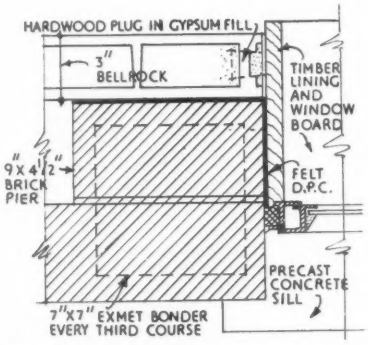
Plans of semi-detached houses



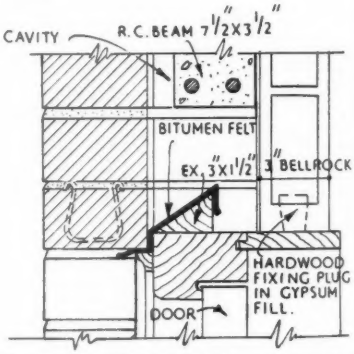
Plans of two of the terrace houses



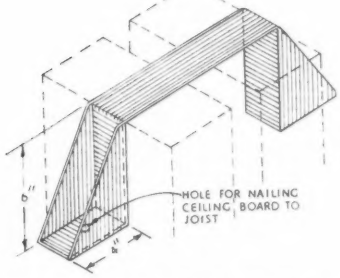
Section through end wall at first floor level



Plan of typical window jamb



Section through head of side entrance door



The galvanised steel double shoe joist unit

This experiment is of considerable importance in the housebuilding field. Apart from the sensational times of erection, the experiment is an application of measures which have been separately advocated for some time. The factors making for success are: (1) Very thorough pre-planning by the architect and contractors. Every item of construction was designed at ½-in. or 1-in. scale or in isometric. (2) First-class organisation by the contractors not only on the site but specially in their works. (3) Prefabrication of all elements that are amenable to it. Indeed, this experiment appreciably narrows the gap between prefabricated and traditional house construction; it specially aims at prefabricating the interior—long thought to be the correct approach—instead of the shell. (4) The use of a largely dry construction. Only the party walls had to be plastered and a skim coat applied to the ceilings. All other wall surfaces were self-finished.

Further developments of this method should prove interesting, specially data on costs, though these cannot be fully ascertained on prototypes but only on large contracts where the full benefits of organisation will be felt. The result is to all intents and purposes a traditional house with presumably traditional maintenance costs.

Practice Notes

Edited by Charles Woodward [*A*]

IN PARLIAMENT. Contracts (Public Tender). Asked if he would issue a circular encouraging local authorities to put out to public tender all contracts for civil engineering and road maintenance before resorting to the practice of direct labour, the Parliamentary Secretary to the Ministry of Housing and Local Government replied: Section 266 of the Local Government Act 1933 makes plain Parliament's intention that public invitation to tender for contracts for the execution of work should be the rule. The model Standing Orders with respect to contracts issued for the guidance of local authorities are framed to embody this principle, and the Memorandum accompanying them stresses the importance of adhering to it. My right hon. Friend does not think that an additional circular is required. (17 March 1953).

Farm Cottages (Development Charges). Asked whether he is aware that agreements still exist between property owners and the Central Land Board involving the liability for payment of development charge if there is a change of user; and whether he will make a statement as to his proposals for abolishing this liability, the Parliamentary Secretary to the Ministry of Housing and Local Government replied: If my hon. Friend is referring to the arrangements for deferring collection of development charge on farm-workers' cottages, my right hon. Friend can assure him that no attempt will be made to enforce the covenants provided that the buildings were still in use as farm cottages on 17 November last. He proposes formally to terminate the liability in next Session's legislation. (17 March 1953.)

Building Licences, Romford. Asked whether it was with his approval and consent that the Romford Borough Council have refused to issue licences for new houses, having an area not exceeding 1,000 square feet, upon the ground that the proposed purchaser of the house was not a person approved by the housing committee of the council, in circumstances to which his attention had been directed, the Minister of Housing and Local Government replied: No. I have asked the borough council to send representatives to meet my officers in order that the council's position as agents of the Government for the issue of building licences may be explained to them. (17 March 1953.)

Roads and Footpaths (Licence-free Repairs). Asked how far his regulations provide that the £500 licence-free allowance for repairs should include a frontager's repairs to footpath and road where this is applicable, the Minister of Works replied: Where portions of un-adopted roads or footpaths form part of the frontager's property, as defined in the Control of Building Operations (No. 18) Order, 1952, work on those portions of the road or footpath comes within the licence-free allowance for the property. (17 March 1953.)

Agricultural Cottages (Reconditioning). Asked how many local authorities were refusing to entertain applications for the reconditioning of agricultural cottages in terms of the Housing Act 1952, the Minister of Housing and Local Government replied: Local authorities do not inform me when they reject applications for improvement grants, but in view of the regrettably small use made of these facilities, I have, through my principal officers, been urging local authorities to be as helpful and encouraging as possible to applicants for grants. I should be happy to look into any evidence which my hon. Friend may have of the particular difficulty he has in mind. (3 March 1953.)

(*Note.* The Housing Act 1952 provides that the occupation of a dwelling by a member of the agricultural population in pursuance of a contract of service shall be treated as occupation by the employer under the contract; and accordingly the service cottage can now benefit from an improvement grant under the Housing Act 1949.)

Town and Country Planning Act (Section 80 Claims). Asked if he was aware of the many cases of hardship that had occurred where small property owners had to pay development charges because they had omitted to make their claims under Section 80 of the Town and Country Planning Act 1947 before 30 June 1949 and what action he proposed to take in the matter, the Parliamentary Secretary to the Ministry of Housing and Local Government replied: My right hon. Friend is not aware that there are many such cases; and the time for making these claims must be terminated some day. People have already had 3½ years beyond the year allowed by the statute. Nevertheless he is anxious to avoid hardship wherever or whenever he can; and he is therefore prepared to continue entertaining claims under Section 80 for a further period. (10 March 1953.)

Local Authority Building Acts. Asked whether he was aware that the present arrangements whereby many large cities have their own individual building Acts, and many local authorities have the right to vary their building regulations, add costs and delays from the inception to completion of a building; and if he will look into this matter to see if uniformity, as is the rule in certain other countries, can be adopted here, the Minister of Housing and Local Government replied: Only three local authorities outside London now control building solely by means of individual building Acts. Most authorities have made building byelaws based on the model series issued by my Ministry and these byelaws cannot be varied by the authorities once they have been confirmed, except with my consent. This procedure has resulted in a valuable growth of uniformity which I hope will go further in the revision now proceeding. (27 March 1953.)

MINISTRY OF HOUSING AND LOCAL GOVERNMENT. Thermal Insulation. Circular 19/53 dated 20 March 1953 refers to the report of the Committee on National Fuel Policy in relation to house construction. A Memorandum on Thermal Insulation of Houses has been issued by the Ministry which deals with estimated costs of obtaining improved insulation as an integral part of the structure or by direct application to certain forms of traditional construction. Improving the insulation of a house may be included in work ranking for grant under the Housing Act 1949, provided the usual conditions are satisfied.

The Circular and the Memorandum are obtainable at H.M. Stationery Office, price 2*d.* and 4*d.* respectively.

Footpaths and Bridlepaths. Circular 20/53 dated 26 March 1953 refers to the creation, diversion and extinguishment of public rights of way under the National Parks and Access to the Countryside Act 1949 and the Acquisition of Land (Authorisation Procedure) Act 1946. Attached to the Circular are notes prepared by the Ministry setting out the procedure to be followed under both the above Acts. The Circular is obtainable at H.M. Stationery Office, price 4*d.*, and this includes the notes which are printed as part of the Circular.

Contracts. Fair Wages Clause. Circular 5/53 dated 10 February 1953 refers to the Fair Wages Resolution passed by the House of Commons in 1946. This Resolution is included as one of the clauses in the R.I.B.A. Standard Form of Contract adapted for use by local authorities.

Model Standing Order No. 13 relating to contracts provides that if a contractor fails to pay his employees wages in accordance with the House of Commons Resolution the local authority may pay to such employees the difference between the sum which the employees may have received from the contractor as wages, and the sum which the employees should have received under the Resolution. The local authority may then recover from the contractor such difference.

Circular 5/53 states that the Minister is aware that Model Standing Order No. 13 has created difficulties for some local authorities, and after reviewing all the considerations that have been placed before him he has decided that it is not suitable for general application to all the various types of contract with which local authorities may have to enter. He therefore proposes no longer to recommend it for general adoption. The Minister recognises that the provisions contained in Standing Order No. 13 may be considered suitable for insertion in particular contracts or contracts of particular kinds, but does not think that local authorities need the specific authority of a Standing Order for this purpose. This Circular therefore should not be taken to prejudice in any way the instructions contained in Ministry of Transport Circular No. 605/1 of 21 April 1947, which relates to road and bridge works.

(The Joint Contracts Tribunal has decided not to amend the Fair Wages clause of the R.I.B.A. Form of Contract for use by Local Authorities by including Model Standing Order No. 13.)

WAR-DAMAGED SITES AND RIGHTS OF LIGHT. In connection with the policy of erecting higher buildings, a letter in THE TIMES written by a barrister points out that owners of sites on which the buildings were destroyed by enemy action run the risk of being unable to increase the height of the original building owing to the provisions of the Prescription Act 1832. Under this Act an owner of a neighbouring building with windows overlooking the damaged site can acquire a right to the access and use of light if it shall have been enjoyed for the full period of 20 years without interruption, unless there is some deed or agreement expressly made between the respective owners preventing the acquisition of such a right. To prevent the acquisition of the right, apart from some agreement, it is necessary to interrupt the access of light for one year, and it follows that after the lapse of 19 years and one day the neighbouring owner's claim to an easement of light may be established if no interruption has taken place, or no agreement has been concluded between the owners.

Unless an amending Act is passed suspending the running of time against the owner of the site whose building was destroyed, it may be that if he starts to build later than, say, 18 years after the war damage occurred, he will be limited in the height to which his new building may be erected. The period of 18 years is suggested so that there may be a year's interruption of the light by the new building before the expiry of 19 years and one day.

An agreement between the parties would seem to be the reasonable course to adopt. The alternative would be to erect a screen and keep it in position for a full year, after which the 20 years' period would start again.

HEATING AND VENTILATING ENGINEERS. DAYWORK CHARGES. A new agreement has been reached between the R.I.C.S. and the Association of Heating, Ventilating and Domestic Engineering Employers on daywork rates. The agreement is the same as that which was in force for the calendar year 1952 except that the percentage rates on labour are increased by 5 per cent. The new agreement will operate for contracts and sub-contracts entered into on or from 1 January 1953, and will remain in force for two years, i.e. up to and including 31 December 1954, unless the Association submit proposals during 1953 for an adjustment of the percentages as between labour and materials, in which case any agreed revisions of the percentages will be applied to the year 1954 only.

Copies of the new agreement are obtainable from the R.I.C.S., 12 Great George Street, London, S.W.1, price 3*d*.

CEMENT (Price Increase). The Cement Makers' Federation have announced that, as an immediate result of the recent increases in the price of coal and power, the prices of ordinary and rapid hardening Portland cement were advanced by 2*s*. per ton on 5 March.

TIMBER. Plywood Price Control. The Ministry of Materials announce that the remaining controls have been removed from plywood prices with effect from 9 March 1953. (S.I. 1953. No. 318.)

TOWN PLANNING DECISIONS. The JOURNAL OF PLANNING LAW publishes through the courtesy of the officer of the local planning authority the results of appeals to the Minister of Housing and Local Government. It appears from the Minister's decision in such appeals that he does not think it reasonable to withhold consent to the erection of a dwelling house solely on the ground that the design is unusual or unconventional. In decisions reported in the JOURNAL OF PLANNING LAW for November 1952 and March 1953 the view is that new ideas in design should be encouraged by local planning authorities, and that an honest design, however unusual, employing good and appropriate materials, should be disallowed only in the rarest cases where the neighbouring development appears to demand a particular, and different, form. Where a design would not appear to be injurious to the amenities of the road, consent should not be withheld, and in the three cases referred to the Minister has allowed the applicant's appeal against the local planning authority's refusal to grant permission on account of the proposed elevational treatment of the house.

Reports of such appeals are well worth noting as they give an indication of the policy in respect of designs which are unconventional. The Bulletins of Selected Appeal Decisions are also very useful for reference, and are obtainable at H.M. Stationery Office. They are published at about quarterly intervals, eleven numbers having been issued since September 1947 by the Ministry of Housing and Local Government.

The issue of the JOURNAL OF PLANNING LAW for April 1953 contains an analysis of the principles which could be deduced from the decisions of the Minister on planning appeals.

BUILDING LICENCES. A question and answer in Parliament in regard to the issue of building licences for houses not exceeding 1,000 sq. ft. is quoted in these Notes under that heading. A Borough Council, according to the question, is refusing to issue licences for 1,000 ft. houses on the ground that the proposed purchaser of the house was not a person approved by the housing committee of the council.

Circular 93/52, quoted in the January issue of the JOURNAL at pp. 106–7, would appear to be quite clear in its language. It states that a licence to build should be issued *without question* to any person who wishes to build or have built a house of not more than 1,000 sq. ft., and to any builder who wishes to build up to 12 houses of not more than 1,000 sq. ft. Planning and bye-law consents must have been obtained and the licences are then to be issued in accordance with the conditions in the Appendix attached to the Circular. There is no condition either in the Circular or Appendix that the proposed purchaser of a 1,000-ft. house must be a person approved by the housing committee of the council.

The Circular states that local authorities are the agents of the Government for the purpose of the issue of these building licences, and the Ministry will now explain to the Borough Council concerned the duties of an agent. In order to avoid any future misunderstanding it may be desirable that a further Circular should be issued to local authorities making their position in this matter quite clear.

LAW CASE

Lebor and Another *v*. Trans-World Airline Incorporated. Court of Appeal. (13 February 1953.) This case concerned the noise caused by pneumatic drills being used by the Defendants in making alterations in the ground floor of premises, the upper floors being occupied as offices by the Plaintiffs. The Plaintiffs applied for an injunction to restrain the Defendants from causing the nuisance. The Defendants undertook not to use drills or power hammers between 2 p.m. and 5 p.m. and the Judge therefore made no order on the application for an injunction. The Plaintiffs appealed on the ground that the undertaking did not go far enough, and said that the use of two pneumatic drills and heavy hammers inside the building caused so much noise, dust and vibration that they were prevented from carrying out their normal work and that dictation or telephone conversations were impossible. The Defendants contended that they had taken precautions by using electrical instead of diesel compressors and had explored alternative methods of doing the work, but none was practical, and that to carry out the work by night would adversely affect the occupants of a hotel and that the work was of a transitory nature.

The Court of Appeal applied what had been held in Andreae *v*. Selfridge & Co. (1938. Ch. 1, 9) that those who said that their interference with the comfort of their neighbours was justified because their operations were normal and usual and conducted with proper care and skill were under a specific duty, if they wished to make good that defence, to use reasonable and proper care and skill and to take proper precautions and to see that the nuisance was reduced to a minimum. In the view of the Court the undertaking did not go far enough. The Court granted an injunction restraining the Defendants from Monday to Friday of any week from 10.0 a.m. to 5 p.m. from using any pneumatic drill or power-driven hammer in such a way as to cause a nuisance. (CURRENT PROPERTY LAW, March 1953.)

Book Reviews

Building Modern Sweden, by *Bertil Hultén.* ob. 7 in. × 8¾ in. 65 pp. incl. pls. text illus. Harmondsworth: Penguin Books. 3*s.* 6*d.*

Mr. Hultén is a Swede and as such particularly well equipped to introduce his country's building achievements to the British public. He has, moreover, stayed and worked in this country for some time and is conversant with British mentality and way of thinking. To him thanks are due for a very readable booklet, which may help the general and interested public to understand the essentials of the Swedish achievement in building, an achievement that is not entirely the result of a stable national life and a prosperous economy. Elsewhere in the world these two conditions have also prevailed, but no comparable architectural result has emerged.

The British public will do well to read Mr. Hultén's carefully presented and pleasantly illustrated record, for it shows a way ahead. Without the help and understanding of the average person in this country, British architecture cannot develop. The Swedish architect evidently has the support of his countrymen when he designs buildings to look quiet, unassuming and worthy of our time without over-dramatising them. He can be envied the more because this support clearly embraces the building industry, as can be seen from the highly successful detailing of these Swedish buildings.

Sweden Builds, *&c.*, by *G. E. Kidder Smith.* (Swedish Institute.) 11 in. × 8½ in. 279 pp. incl. pls. text illus. Architectural Press. £2 5*s.*

Mr. Kidder Smith is first and foremost an excellent photographer. In his books on the architecture of various countries he has built up a series of records which are of considerable usefulness. His method of presenting his material as picture books with factual captions and a short general introduction is always welcome, as it avoids both heavy transcendentalism, the boredom of so much architectural philosophy and the *ennuyant* jargon and slightly stale enthusiasm of post-avant-guardist writers.

To condense much useful information in a picture book on architecture is a feat, and Mr. Kidder Smith's *Sweden Builds* succeeds as well in this respect as with his other books. The architect who knows many of the buildings shown in this handsome and well-produced volume will enjoy possessing a record of such an excellent standard.

Whatever may be said now on the subject itself—and here Mr. Kidder Smith cannot be entirely absolved from a somewhat patronising attitude—Sweden presents to the world probably the best example of a modern architecture on a nation-wide basis. To go from Malmö through the towns of southern Sweden to Stockholm and to find everywhere unison of architectural expression is an experience; to go from Calais to Paris is architecturally depressing. France may have its Unité d'Habitation somewhere in the south; but Sweden has its 'point houses' everywhere and, though individually they may probably be less 'exciting' or 'imaginative', they represent on a national basis by far the more significant and solid achievement. They indicate the Swedish nation's acceptance of a higher standard of architecture, an aim that is not even approached elsewhere. This outstanding fact about Sweden's architecture might have deserved more attention from the author; on the other hand, in his photographs he has made it plain for everybody to see. *Sweden Builds* should be on every architect's bookshelf to remind him what others have done, and to console him in moments of depression when the task of guiding his public might seem sometimes too hard.

WALTER SEGAL

A Guide to Saint Albans Cathedral; *Royal Commission on Historical Monuments, England.* 8¼ in. × 6½ in. 28 pp. + front. + 12 pls. + folding plan. H.M.S.O. 1952. 2*s.* 6*d.*

It was a happy thought to combine in one operation a revision of the none-too-adequate account in the Commission's *Herts* volume, 1910—their first—with a popular production in handy format and narrative style; an 'official' guide to a place of worship in England is a novel feature. There are a plan as now, a longitudinal section of the church as it was before Lord Grimthorpe's mutilations (1879), and 20 excellent photos. On points of detail the booklet naturally avoids controversy: e.g. the baluster-shafts in the transepts are merely 'Saxon', leaving the debatable date open. 'Pilaster-strips', by the way, mentioned just after, presumably means the Norman pilasters or internal buttresses. It is greatly to be hoped that this process of retrospective revision and popularisation will be continued with many similar buildings.

Norfolk Church Monuments, by *C. L. S. Linnell* and *Stanley J. Wearing.* 8½ in. xiv + 56 pp. + (27) pls. and pp. of illus. Ipswich: Norman Adlard. 1952. 15*s.* 6*d.*

It is good to see another contribution to the regional knowledge of East Anglia by S. J. Wearing [*F*] and a fellow council member of the Norfolk and Norwich society. Very varied designs are illustrated in the memorials of some 25 Norwich churches and many more in the county beyond, ranging from about 1550 right up to 1880. There are not only photographs but pencil elevations (a feature one does not remember having seen before), and even one subtle water-colour interpretation of coloured marbles, slate and paint. There are detailed notes, a list of sculptors (with their recorded works) in chronological order, and biographical notes of those commemorated, in the same order; an index contains all of these. Although the 'antique' text paper makes the book thicker than it need be, the work is crowded with information.

The Story of Gloucester Cathedral, by *G. H. Cook.* 8¾ in. 16 pp. + (33) pls. + endpaper plan. text plan. Phoenix House. 1952. 6*s.*

During the last few years Phoenix House has published four volumes in the 'Portrait' series—Canterbury, Durham, St. Albans, and Salisbury. In the second case a smaller companion, *The Story of Durham Cathedral*, was issued in 1951 (see JOURNAL review, 1952 February, p. 142) as likely to command more general interest. In the case of Gloucester, the 'Portrait' was abandoned and the 'Story' has appeared instead; it contains all that is really necessary—historical text and itinerary, a good selection of photographs, including the scanty monastic buildings, dated plan and crypt plan. No index is necessary. H. V. M. R.

Farm Buildings, New and Adapted, by *Edwin Gunn.* 4th ed. (Agricultural and horticultural series.) 8½ in. 160 pp. + xviii pls., some double. Text illus. Crosby Lockwood. 1952. 12*s.* 6*d.*

The new and revised edition of Edwin Gunn's book is most welcome. In the main, it covers factors of building not dealt with in Post-War Building Studies Nos. 17 and 22, and is therefore a logical complement to them. A chapter on farm cottages has been added.

First and Last Loves, by *John Betjeman.* 8½ in. xi + 244 pp. incl. pls. + folding pl. text illus. John Murray. 1952. £1.

The title is fair enough anyway. As 'The Great Lover' John Betjeman leaves John Barrymore asleep at the post, so warm is his heart, so sharply compassionate his eye. Of course we have met his loved ones many times before, and though perhaps we love some of them less for themselves than because we love Mr. Betjeman, nevertheless it is nice to see them, like favourite toys, lifted once more out of the cupboard for an affectionate pat before, a little dog-eared and threadbare now perhaps, they are put away once more.

The list is as long and complex as one of those Fuller Horsey industrial sales catalogues sometimes to be seen on railway hoardings . . . trams and gas-lit workmen's institutes, lecherous canons, Comper and parish notice boards, smoke-grimed viaducts, freckled girls hitting tennis balls at Frimley or rigging 'sharpies' on the Solent, the striped sanatoria of Bagshot, deserted railway stations, Comper, the sound of a sea wind in tamarisks, hatchments and chapels and oil lamps, the bells of evensong across leafy suburbs and bicycles and tennis-dances and unadopted roads and Comper. How wrong of Mr. Piper then—or have I missed the point?—to draw upon the dustcover the picture of a heart of rusticated stone, from which angrily project spears and lances.

Nevertheless we must admit that like all great lovers Mr. B. is also a great hater—at least in his prose works. (In his matchless verses spleen is always defeated in the end by compassion.) His hatreds we have not

met in bulk since *Ghastly Good Taste*, and they have not changed—pylons and patent cereals and vicars' wives and cocktail cabinets and civil servants and antiquaries and filing cabinets and arty department stores and garden cities and chain-stores and concrete lamp-posts—and head of them all, of course, nearly all living architects.

We cannot, of course, reasonably object to this. Any genuine lover of architecture must sometimes find it hard to love those of us who practise it. But somehow, as is often liable to happen, Mr. B.'s stings are so keenly directed that the reader begins to feel sympathy and not scorn for the victim. What, after all, Mr. B., is so basically unsympathetic about a senior civil servant downing his Weetabix at Esher before catching the 8.45 to Waterloo? Surely he needs your sympathy no less than your lonely business girl crouched over her Kensington gas-ring? And the vicar's wife, hanging the Margaret Tarrant up in the Children's Corner, surely needs kindness, not coshing?

Mr. B. disarmingly admits in a foreword that we shall find much to complain of in this book. I found very little. Certainly I became at times uncomfortably aware of having been there before. One or two anecdotes recur and Tickleby-Tom-Cat is very like Loathly Crumpet, and only Mr. Piper's drawings save the chapter on 'Nonconformist Architecture' from touching the fringes of dullness. Nor, had I been editor, would I have included 'Cheltenham' and 'The Architecture of Entertainment', both of which seem to me a little perfunctory. But, at his best, how admirably and irresistibly he makes amends when, sharp-eyed as a coastguard, he wanders through the streets and country lanes of England. It is worth buying the book just for 'Coast and Country'—a series of West Regional broadcast talks which are as lyrical and poignant and enchanting as his poems—and surely there can be no higher praise than this.

HUGH CASSON [*F*]

The Law of Easements, by *S. L. Newcombe.* 4th ed. [of R. Parry and A. B. Howes, Law of easements]. 8¼ in. xvi + 188 pp. Estates Gazette. 1951. [1952]. £1 7*s.* 6*d.*

This book is an outline of the law of easements and is written for architects and surveyors who may require guidance in the subject. Technicalities have therefore been omitted, which is an advantage, as such matters are for a lawyer. Light and support are the easements usually met with in an architect's practice and these are dealt with in clear language easily understood by a layman. The chapter on the Right to Air explains why an easement cannot be acquired by prescription, except where the access of air is either through a definite aperture or a definite channel over adjoining property. The description of a 'light and air case' is inaccurate and inappropriate, as the author points out.

Water and rights of way are usually matters for lawyers, though 'easements of drainage' in the chapter on Water are subjects for an architect in his practice, and can be referred to with advantage.

There are numerous references to case law and the index is comprehensive.

Besides practising architects, students will find this book worthy of study in preparation for their examination in professional practice.

C. W.

Lettering Art in Modern Use, by *Raymond A. Ballinger.* 11¾ in. 246 pp. incl. pls. and pp. of illus. New York: Reinhold; Lond.: Chapman & Hall. 1952. £4 16*s.*

The author is the Director of the Department of Advertising Design at the Philadelphia Museum School of Art and is known as a commercial artist in the United States. One would therefore expect that a high proportion of the examples of lettering would be chosen from packaging, poster and display sources. What is surprising is that so much of this expensively dressed book should be devoted to illustrations of 19th century and still earlier lettering of extraordinary elaboration, more curious than instructive, and of rather limited value, surely, to the student. Mr. Ballinger also shares the current American craze for informal 'free' script. It is a style which the French and Italians, with their sense of elegance, employ very pleasantly on occasion, but in America it has invaded commercial architecture in force, and with generally sorry results.

Logically enough, most of the lettering shown is transatlantic, but of the foreign work, the Swiss, as is proper, emerge best, though inadequately represented. On the whole then, this is a slightly disappointing book. The selection is hardly representative of the truly best, and this is a pity, since it is a field in which much progress is being made and has been made in the recent past. If, however, one regards the lettering in this volume as the extremely personal choice of one expert and not as a complete survey of the best in modern use, there is no reason for complaint.

J. C. P.

High Paddington, designed by *Sergei Kadleigh* [and] *Patrick Horsbrugh.* ob. 8½ in. × 11½ in. (8) pp. + (32) pls. + maps on cover. Architect and Bldg. News. 1952. 7*s.* 6*d.*

This well-produced booklet summarises and illustrates the fiercely-reviled and wildly-applauded project to build a town for 8,000 people, four hundred feet high, astride Paddington station goods yard.

Correspondence

THE COLLECTION AND PRESERVATION OF PERSPECTIVE DRAWINGS

SIR,—A proposal has come from Mr. E. Vincent Harris that the Institute should sponsor a collection of recent architectural perspective drawings and his proposal has the active support of other members, including the President and Past-Presidents, Mr. Michael Waterhouse and Mr. Goodhart-Rendel.

The importance of preserving contemporary records and those of the immediate past has received ample stress through losses sustained during the last war. Perspective drawings are among those architectural documents which may be destroyed or mislaid for many reasons after a building has been completed, especially in these days of photographic records of finished works.

The sustaining of continuity in such records has received, since the war, a great deal of attention from the Library Committee and the Drawings Sub-Committee. Apart from indexing and examination and repair of the existing collection, work never before adequately attempted, the Committee have received on behalf of the Institute many generous gifts of drawings for the collection. It is noticeable, however, that the final 'show' perspective, prepared for clients or exhibitions, is often conspicuous by absence; it is this type of drawing for which Mr. Vincent Harris pleads preservation.

Architecture in this country has a great tradition of fine draughtsmanship in the field of 'perspective drawings', stemming from the early work of the topographical draughtsmen and receiving continual revivification from the English landscape water-colour school over the last 150 years. The Library Committee, for these various reasons, therefore welcome the proposal to extend the collection and to fill in gaps of which they are only too well aware.

May I appeal to any interested architects or draughtsmen who would be willing to give drawings to communicate with the Librarian, Mr. James Palmes? It is, of course, essential that selection should be made with due regard to the importance or architectural interest of the buildings portrayed, equally with qualities of fine draughtsmanship. While it is suggested that there should be some intensive concentration on the period between the years 1918 and 1939, buildings or drawings of other dates may be equally important for the collection. In order that the latter may be properly co-ordinated, the ultimate selection for inclusion will rest with the Library Committee of the Institute, with their responsibilities to the Council. Any drawings (or photographs thereof) will be carefully looked after and returned to owners if they (or the originals) are not required for the collection for any specific reason.

The Committee, administering on behalf of the Institute what is certainly one of the two most comprehensive architectural libraries in the world, wish to see the other and newer side of their work—the drawings and engravings collection—take a similar place in the years that lie ahead; much has been done, but much remains to achieve.

S. ROWLAND PIERCE
Chairman, Library Committee

Notes and Notices

NOTICES

One Hundred and Fifteenth Annual General Meeting, Tuesday 5 May 1953 at 6 p.m. The One Hundred and Fifteenth Annual General Meeting will be held on Tuesday 5 May 1953 at 6 p.m. for the following purposes:

To read the Minutes of the Seventh General Meeting held on 31 March 1953; formally to admit new members attending for the first time since their election.

To receive the Annual Report of the Council and Committees for the official year 1952–53 (copies of the Annual Report were sent to members on 21 April).

To nominate two members as Hon. Auditors for the ensuing year.

(Light refreshments will be provided before the meeting.)

Minutes VII. Session 1952–1953. At the Seventh General Meeting of the Session 1952–1953, held on Tuesday 31 March 1953 at 6 p.m.

Mr. Howard Robertson, M.C., A.R.A., S.A.D.G., President, in the Chair.

The meeting was attended by about 600 members and guests.

The President referred to the death of Her Majesty Queen Mary and the loss suffered by Her Majesty The Queen, the Royal Family and the whole nation. Members stood in silence for a few moments as a token of respect.

The Minutes of the Sixth General Meeting held on Tuesday 3 March 1953 having been published in the JOURNAL, were taken as read, confirmed and signed as correct.

The President delivered a short address on the presentation of the Royal Gold Medal 1953 to Monsieur Le Corbusier (H.C.M. France), and called upon Monsieur Claude Lebel, representing the French Ambassador, Sir Herbert Read, D.S.O., M.C., Litt.D., M.A., Mr. Robert H. Matthew, C.B.E. [*A*], Mr. W. W. Wells-Coates, O.B.E., Ph.D., B.A., B.Sc. [*F*], and Mr. Colin Glennie, a student at the Architectural Association School of Architecture, to speak on the work of Monsieur Le Corbusier.

The President then asked Mr. Edward Maufe, R.A., M.A., LL.D. [*F*], and Dr. Charles Holden, D.Lit., Litt.D., M.T.P.I. [*F*] (two Royal Gold Medallists) to escort Monsieur Le Corbusier to the platform.

Having been invested with the Medal, Monsieur Le Corbusier expressed his thanks for the honour conferred upon him.

The proceedings closed at 7.12 p.m.

R.I.B.A. Reception Friday 29 May 1953. The R.I.B.A. Annual Reception will be held on Friday 29 May 1953 from 9 p.m. until 1 a.m. The President and Mrs. Robertson will receive the guests in the Henry Florence Hall from 9 p.m. to 9.45 p.m. and there will be dancing from 9.45 p.m. until 1 a.m. Evening dress will be worn.

Tickets are 15*s*. each and applications, which must be accompanied by the necessary remittance, should be made to the Secretary, R.I.B.A. Payment must be made by crossed cheque, money order or postal order.

British Architects' Conference, Canterbury and Folkestone 1953. All members and Students of the R.I.B.A. and of the Architectural Association and the Allied Societies are cordially invited to attend the Conference to be held in Canterbury and Folkestone from 10 to 13 June. Full particulars and the application form were enclosed with the March issue of the JOURNAL.

It will greatly facilitate the arrangements if all who propose to attend the Conference will complete the application form and return it to the Secretary, R.I.B.A., as early as possible, but in any case *not later than 16 May*.

Special attention is drawn to the note on page 4 of the programme and to the necessity of reserving hotel accommodation without delay.

Amendment to the Code of Professional Conduct. At their meeting on 31 March 1953 the Council approved an amendment to Clause 6 of the Code of Professional Conduct. The revised Clause now reads as follows:—

6. A member or Student must not advertise or offer his professional services to any person or body corporate by means of circulars or otherwise, or make paid announcements in the Press; except that:—

(*a*) he may apply to prospective employers for a salaried appointment;

(*b*) he may advertise a professional appointment, open or wanted, provided the advertisement is directed only to members of the profession concerned;

(*c*) he may respond to an advertisement addressed to members of the profession inviting them to submit their names for inclusion in a panel or list of names of architects, from which the advertiser may select an architect or architects for a particular project; provided that his response to such an advertisement does not contravene any other Clause of this Code or the Royal Institute's Regulations for the Conduct of Architectural Competitions from time to time in force;

(*d*) he may insert in the architectural professional Press one notice of change of address;

(*e*) he may notify his correspondents by post once of any change of address.

R.I.B.A. Kalendar 1953–54. The next issue of the Kalendar will be published in the autumn and members and Students wishing to notify new addresses, etc., for publication in that issue should do so as soon as possible. The last date for receiving changes for inclusion in the new Kalendar will be 30 May for those in the United Kingdom and the Republic of Ireland and 30 June for those overseas.

Kalendar 1952–53; Correction. The following further correction should be noted. Page 66, Beam: Norman Stewart. The surname should read **Bean.**

Members and Professional Affixes. The Council's attention has been called more than once to the practice among some members of adding a string of letters of doubtful value to the affix on their letter-paper denoting membership of the Royal Institute.

This is a matter in which the Council obviously cannot dictate to members and must trust to their good sense. It should be obvious, however, that the affix of a chartered body of high standing is weakened in effect by the addition to it of a string of other mysterious designations, some of which probably indicate no more than the payment of an annual subscription.

Licentiates and the Fellowship. By a resolution of the Council passed on 4 April 1938 all candidates whose work is approved are required to sit for the Examination, which is the design portion of the Special Final Examination, and no candidates will be exempted from the examination.

Note.—The above resolution does not affect Licentiates of over 60 years of age applying under Section IV, Clause 4 (*c*) (ii) of the Supplemental Charter of 1925.

Classes of Retired Members. Under the provisions of Bye-law 15 applications may be received from those members who are eligible for transfer to the class of 'Retired Fellows', 'Retired Associates' or 'Retired Licentiates'. The Bye-law is as follows:

'Any Fellow, Associate or Licentiate who has reached the age of 55 and has retired from practice may, subject to the approval of the Council, be transferred without election to the class of "Retired Fellows", "Retired Associates", or "Retired Licentiates", as the case may be, but in such case his interest in, or claim against the property of, the Royal Institute shall cease.

'The amount of the annual subscription payable by such "Retired Fellows", "Retired Associates" or "Retired Licentiates" shall be one guinea, or such amount as may be determined by resolution of the Council, excepting in the case of those who have paid subscriptions as full members for 30 years, and who shall be exempt from further payment. A "Retired Fellow", "Retired Associate" or "Retired Licentiate" shall have the right to use the affix of his class with the word "Retired" after it, shall be entitled to receive the JOURNAL and Kalendar, shall be entitled to the use of the Library, and shall have the right to attend General Meetings, but shall not be entitled to vote. A "Retired Fellow", "Retired Associate" or "Retired Licentiate" shall not engage in any avocation which in the opinion of the Council is inconsistent with that of architecture. Nothing contained in this Bye-law shall affect the rights of persons who at the date of the passing of this Bye-law are members of the classes of "Retired Fellows" and "Retired Members of the Society of Architects".'

COMPETITIONS

Hospital at Doha, Persian Gulf

The Government of Qatar, Persian Gulf, invite architects registered under the Architects' Registration Acts to submit designs for a 100-bed hospital, complete with staff quarters, at Doha.

Assessor: Mr. Alexander S. Gray [*F*], of Messrs. W. H. Watkins, Gray & Partners.

Premiums: £1,250, £1,000, £750.

Last day for submitting designs: 15 August 1953.

Conditions may be obtained on application to: Captain J. E. Stone, C.B.E., M.C., F.S.A.A., Hon. Secretary and Treasurer, International Hospitals Federation, 10 Old Jewry, E.C.2.

Deposit: £3 3*s*.

Envelopes to be marked 'Doha Competition'.

Sheffield University Competition

The University of Sheffield invite architects registered under the Architects' Registration Acts and resident in Great Britain, Northern Ireland or the Republic of Ireland to submit, in competition, designs for certain buildings to be erected on sites within the central area of the University, together with a layout and sketch elevations for other buildings also to be located within that area.

Assessors: Sir Percy Thomas, O.B.E., Past-

President, Mr. F. R. S. Yorke [*F*], and Mr. Gerard Young, J.P.
Premiums: £5,000, £3,000, £2,000.
Last day for submitting designs: 31 October 1953.

Conditions may be obtained on application to: The Secretary, Architectural Competition, The University, Sheffield. Deposit: £2.

ALLIED SOCIETIES

Changes of Officers and Addresses

Blackpool and Fylde Architectural Society. President, James Rawlinson, F.R.I.C.S. [*L*], 54 Adelaide Street, Fleetwood, Lancs.

Essex, Cambridge and Hertfordshire Society of Architects, Cambridge Chapter. Chairman, T. H. Corner [*A*].

Devon and Cornwall Society of Architects, Truro Branch. Chairman, C. W. R. Corfield [*L*]. Hon. Secretary, J. H. Crowther [*F*].

Federation of Malaya Society of Architects. President, A. O. Coltman, M.B.E. [*L*]. Hon. Secretary and Treasurer, V. S. van Langenberg [*L*].

Institute of Architects of Malaya. President, W. Irving Watson [*F*]. Hon. Secretary, G. E. Magnay [*A*].

New Zealand Institute of Architects. President, Jack Ian King [*A*].

Manchester Society of Architects: Annual Dinner. The Annual Dinner of the Manchester Society of Architects was held at the Masonic Temple, Manchester, on Thursday 29 January 1953.

Mr. W. Cecil Young [*F*], President, was in the Chair. It was a very well attended and successful function. Among the principal guests were Alderman A. Moss, J.P., representing the Lord Mayor; Mr. C. H. Aslin, C.B.E. [*F*], Vice-President R.I.B.A., and Mrs. Aslin; Dr. E. J. F. James, D.Phil., High Master of Manchester Grammar School; Mr. E. Jordan, O.B.E., Principal Regional Officer, Ministry of Health; Mr. W. D. Marshall, C.B.E., F.A.I., Regional Director, Ministry of Works; Mr. P. L. Hughes, O.B.E., Principal Regional Officer, Ministry of Local Government and Planning; Mr. C. D. Spragg, C.B.E., Secretary R.I.B.A.; Mr. F. J. M. Ormrod [*F*], President of the Liverpool Architectural Association; Mr. T. N. Cartwright, D.S.C. [*F*], President of the Nottingham, Derby and Lincolnshire Architectural Society; Mr. N. Pyman [*F*], President of the West Yorkshire Society of Architects; and Mr. E. Elden Minns [*L*], President of the South Yorkshire and District Society of Architects.

In proposing the toast of the Royal Institute of British Architects, Mr. W. Cecil Young thought it unfortunate that it appeared to be outside the scope of the Royal Institute to control the fecundity of the schools of architecture. Mr. C. H. Aslin responded on behalf of the profession.

The toast of 'The City of Manchester' was proposed by Dr. Eric James, who, in referring to the affection for Manchester of its citizens, said: 'Perhaps one might say that for its size it is the most wilfully ugly city in the world. I sometimes think that to be an architect in Manchester must be something like being a teetotaller in Burton-on-Trent. We perhaps look on this with a certain complacency, a feeling that the virtues of Manchester are somehow linked with its ugliness.' Dr. James went on to point out how much the rest of England depended on the Manchester area, not only for its wealth and prosperity, but also for a great deal beyond. Alderman Moss replied on behalf of the Lord Mayor and the City.

The toast of the Guests, proposed by Mr. Leonard C. Howitt, M.T.P.I. [*F*], City Architect, was read on his behalf by Mr. Gerald Sanville [*F*], and Mr. F. J. M. Ormrod and Dr. D. D. Matthews responded. The health of the Chairman was proposed by Mr. C. D. Spragg, C.B.E., Secretary R.I.B.A.

Leicestershire and Rutland Society of Architects: Dinner. A dinner of the Leicestershire and Rutland Society of Architects was held at the Grand Hotel, Leicester, on Friday 6 February. Among the guests were the Rt. Hon. The Lord Cromwell, Lord-Lieutenant of Leicestershire; Mr. Howard Robertson, M.C., A.R.A., S.A.D.G., President R.I.B.A., and Mr. C. D. Spragg, C.B.E., Secretary R.I.B.A.; and Mr. W. T. Lewis, Regional Director of the Ministry of Works. In all, the attendance was about 145.

After the Loyal Toast had been proposed by Mr. A. E. Herbert [*A*], President of the Society, Mr. G. A. Cope, M.C. [*F*], proposed 'The City and County of Leicestershire' and Lord Cromwell and Mr. C. H. Wilson, Principal of The University College, Leicester, responded. The toast of 'The R.I.B.A. and Allied Societies' was proposed by Mr. Herbert, and the President R.I.B.A. responded. Mr. Howard Robertson expressed the hope that in the near future conditions in the country might allow craftsmanship in the building industry to be encouraged. He then presented the R.I.B.A. Bronze Medal for the four years ending 31 December 1950 to Mr. T. W. Haird [*F*], of Messrs. Pick, Everard, Keay and Gimson. Mr. C. C. Ogden [*F*] proposed the toast of 'The Guests' and Mr. G. E. Bouskell Wade, M.B.E., responded.

Hampshire and Isle of Wight Architectural Association: Annual Dinner and Dance. The annual dinner and dance of the Hampshire and Isle of Wight Architectural Association was held at the Royal Bath Hotel, Bournemouth, on Friday 20 February. About 350 members and guests were welcomed by Mr. Gordon Sutcliffe [*A*], President of the Association. Among the guests were Mr. Howard Robertson, M.C., A.R.A., S.A.D.G., President R.I.B.A., and Mrs. Robertson, and Mr. C. D. Spragg, C.B.E., Secretary R.I.B.A.; Mr. Nigel Nicolson, M.B.E., M.P. for Bournemouth East and Christchurch, and Viscount Cranborne, M.P. for Bournemouth West; the Mayors and Mayoresses of Bournemouth, Christchurch, Winchester, Poole and Lymington; Southampton's Chief Education Officer, Mr. F. L. Freeman, C.B.E.; Mr. Ernest Bird [*F*], Past-President of the Association; Mr. R. E. E. Beswick, M.B.E. [*A*], President of the Wilts and Dorset Society of Architects; Mr. J. Burton [*A*], Borough Architect, Bournemouth; and various local representatives of the building industry.

Mr. Nigel Nicolson, proposing the toast of the R.I.B.A. and the Allied Societies, urged architects to pay attention to the street, which Britain had lost the habit of building. He said semi-detached houses were 'pock-marking the landscape' in a way not always pleasing to the eye. He thought there had been a great improvement in architecture since the end of the war, as witness the housing estate at Christchurch. He urged architects to keep what was now beautiful, beautiful for our descendants.

The President, R.I.B.A., responding, said the R.I.B.A. had approached the appropriate Minister about preserving English building. Mr. Sutcliffe proposed the toast of the guests, and the Mayor of Bournemouth, Ald. H. A. Benwell, M.C., B.E.M., responding, made a plea for warmer houses. The Mayor of Winchester, Cllr. Miss D. M. Edmeades, J.P., also responded. A further response was made by Southampton's Chief Education Officer, Mr. F. L. Freeman, who said Southampton's first aluminium school was to be opened at Easter. For his part Mr. Freeman regretted that aluminium should be quicker to build in than brick.

GENERAL NOTES

Truscon Travelling Scholarship for the study of Reinforced Concrete Construction. The Trussed Concrete Steel Co. Ltd., of Lower Marsh, London, S.E.1, offer a Travelling Scholarship of £100 to enable an Associate of the R.I.B.A. to undertake a continental tour of about three weeks' duration. The winner will be accompanied by a member of the company's technical staff awarded a similar scholarship, and they will be required jointly to study interesting reinforced concrete work on the continent of Europe. A joint report will be prepared, the use and copyright of which will remain at the disposal of the Trussed Concrete Steel Co. Ltd. Applicants must be under 35 years of age and must provide evidence of their office experience and of their special interest in the subject of the scholarship, i.e. the use in contemporary architecture of reinforced concrete.

Applications must be submitted by the 15 May 1953 to the Trussed Concrete Steel Co. Ltd., Lower Marsh, S.E.1, and must contain the following particulars: Age, architectural education, academic qualifications, present occupation or employment, evidence of the candidate's suitability for appointment to the Scholarship (a knowledge of French, Italian or Spanish would be of considerable value), the names of two persons to whom reference may be made regarding the candidate's fitness for appointment to the Scholarship.

The applications will be considered by a Selection Committee consisting of one representative of the Trussed Concrete Steel Co. Ltd., and two representatives of the Royal Institute of British Architects: Mr. G. Grenfell Baines [*A*] and Mr. C. S. White [*F*].

Cornell University: Fellowship in Landscape Architecture. The Department of Landscape Architecture in the College of Architecture at Cornell University is offering the Francke Huntington Bosworth Memorial Fellowship in Landscape Architecture of one thousand dollars for the academic year 1953–54. Candidates must be graduates of an accredited school of architecture or landscape architecture. The academic programme will stress the relationship of landscape architecture to architecture and city planning. The degree Master of Landscape Architecture will be granted upon satisfactory completion of the required work.

Further inquiries should be directed to Dean Thomas W. Mackesey, College of Architecture, Cornell University, Ithaca, New York.

Applications will be received until 1 June 1953.

The Care and Repair of Churches. A very successful one-day symposium on the care and repair of churches was held at the Royal West of England Academy School of Architecture, Bristol, on Thursday 19 March 1953.

The meeting, which was opened by the Lord Bishop of Bristol (Dr. F. A. Cockin), was well attended. Those present included Archdeacon Reddick and the Dean of Bristol (Dr. Lunt), representatives from the Diocesan Advisory

Committees of Bristol, Bath and Wells, and practising architects from as far afield as Weymouth, Salisbury and Cheltenham. The papers in the morning included an appreciation by Mr. Lance Wright [*A*], a brilliant unscripted talk by Mr. J. C. Perks, Chancellor of the Diocese of Bristol, and a talk on Surveys by the Diocesan Surveyor, Mr. Francis L. Hannam [*A*]. After lunch, Mr. T. H. B. Burrough [*F*] spoke on the Interior Arrangement of Churches and was followed by Major R. J. Potter [*F*] of Salisbury with a talk, mainly illustrated by his own photographs, on Roof Coverings and Repair Work.

The meeting had the support of the Central Council for the Care of Churches, and through its Secretary (Dr. Francis Eeles) provided a small exhibition of photographs. Other exhibition material was lent by the Society for the Protection of Ancient Buildings.

This symposium was the first of the kind to be arranged at the R.W.A. School of Architecture and, indeed, in the West of England. It is hoped that it may be the forerunner of organised courses on this very important and topical subject.

Obituaries

Lionel Godfrey Pearson [*F*] died on 19 March, aged 74.

Mr. Pearson trained with Messrs. Woodhouse & Willoughby, Manchester, and at the Liverpool School of Architecture. After a period with Professor E. S. Prior, Mr. Pearson went to Dr. Holden and Mr. H. Percy Adams in 1903 as assistant. In 1913 he became a partner. In 1929 the firm was awarded the London Architecture Bronze Medal for the premises at 55 Broadway, Westminster, headquarters of the present London Transport Executive.

Mr. Pearson was principally associated with hospital work, but there were also the R.A. Memorial, Hyde Park Corner (architectural work and layout) and the 'Rima' Hudson Memorial, Hyde Park (layout and structure); also the Bristol Central Reference Library. Mr. Pearson wrote numerous articles in the technical press and also lectured on hospital planning.

He was a member of the Executive Council of the Town and Country Planning Association and of the British National Committee of the International Union of Architects and of the Hospitals Committee and had also served on the following R.I.B.A. Committees: the Literature Standing Committee, Schools Committee, Lectures Committee, Architectural Use of Building Materials Committee (Ministry of Works), Codes of Practice Committee on External Walling and Internal Walls and Partitions (Ministry of Works), Joint Committee of R.I.B.A. members of the Codes of Practice Committee, and the Post-War Hospital Building Committee. He was an enthusiastic and discriminating patron of the fine arts.

Dr. Charles Holden [*F*] writes the following detailed account of Mr. Pearson's career:

'It is impossible to write about my old friend and partner, Lionel Pearson, without deep emotion. Looking through old diaries his name first appears in November 1897, followed four days later by a lunch at his home in Manchester where his father, the Rev. Samuel Pearson, presented me with a small copy of Browning's poems, and when they consulted me about Lionel becoming an architect.

'Strange to say they followed my advice and Lionel was duly apprenticed to Messrs. Woodhouse & Willoughby of Manchester.

'On the completion of his indentures he proceeded to Liverpool University, where he remained a couple of years under Professor F. M. Simpson before coming to London to enter the office of E. S. Prior.

'I was by that time working with H. Percy Adams at his office and residence in Woburn Place. Pearson was a very frequent visitor to our cottage in our Hertfordshire village where so many of our friends foregathered at the week ends—Francis Dodd, Muirhead Bone, James Bone, Will Ansell, Benjamin Nelson, Joseph Knight, Halley, and Stallybrass.

'In September 1903 Pearson joined our staff. By this time an interesting variety of work was flowing into the office: the Law Society, Chancery Lane; the Belgrave Hospital, Kennington; the British Medical Association in the Strand; the King Edward VII Sanatorium at Midhurst; the Hospital for British Seamen at Constantinople and the Bristol Central Reference Library.

'In February 1907 my partnership agreement with H. Percy Adams was signed. In the year 1913 our partnership with Pearson was discussed and the terms arranged.

'We worked on many interesting schemes together, including the King's College of Household and Social Science (now Queen Elizabeth College), the King Edward VII Sanatorium and Chapel and on a number of competitions on which we spent many midnight hours with varying degrees of success. A few years later, when the work on the new Underground stations was getting under way, and particularly during the building of 55 Broadway, it fell to Lionel to relieve Percy Adams in the hospital work, which was becoming exigent and almost a whole-time occupation, and Lionel took up this work with zest.

'In December 1914, on the outbreak of war, Lionel enlisted as a private in the Sanitary Corps and in April 1915 he left for France. Later he was appointed to the Graves Registration and Enquiries and the War Graves Commission with the rank of Lieutenant, but the time he spent in the Sanitary Corps, first as a private and then as a sergeant, always held a warm corner in his loyalties.

'About his powers as a designer Lionel was very reticent, quite unnecessarily so, for he had a very sure sense of the right thing and invariably achieved it. His houses had a rare quality, almost quaker-like in their straightforward directness and simplicity, which was very satisfying and good to live with, sturdily built without any attempt to reduce cube by the use of low roofs and dormers and such like garden city devices. His hospital work was equally straightforward and to the point and distinguished by good sense and good taste in all its parts.

'He would take infinite trouble in the selection of his materials and nothing degenerated into the commonplace with him. He would engage actively in useful research work into materials and methods to meet any special problem—and not always his own problems.

'He was one of the most modest of men and would often retire into the background in important functions unless his presence was demanded. His friendship was an ever-present support at all times.

'With the sad death of our senior partner, Percy Adams, in 1930 we felt that the bottom had dropped out of our world, but the subsequent events showed that we had little to fear from this new responsibility thrust upon us.

'The expansion in the office organisation led inevitably to an increase in the secretarial staff, with the result that Lionel made the acquaintance of Melinda Osborne, who later became his wife. Melinda took a lively interest in the work of the office and cleverly saw to the completion of their house at Roehampton at a time when Lionel was confined in his brother's sanatorium at Mundesley. They had one daughter who, true to her father's old loyalty, is now a nurse in Westminster Hospital.'

Mr. W. A. Guttridge [*A*], who joined the partnership in 1947, adds the following:

'After the first world war Lionel Pearson returned to the firm of Adams, Holden & Pearson and immediately became fully occupied with hospital work. In the 'twenties he carried out the Margate General Hospital, Southend General Hospital, Deal and Walmer Hospital, Royal Westminster Ophthalmic Hospital, Torbay Hospital and extensive additions to many others, including Worcester Infirmary, Gloucester Infirmary and the Royal Northern Hospital.

'In the 'thirties he was mainly occupied with the last major scheme he saw built, namely the new Westminster Hospital, together with its nurses' home and medical school. The hospital was opened by H.M. King George VI in July 1939 and not many months later received its first direct hit by a bomb.

'Just before the war the firm was invited to enter a limited competition for a large new teaching hospital at Sheffield and Pearson was fully occupied on that for some time. The result was published in 1940 and the firm was successful in gaining first place.

'During the war he worked on E.M.S. hospitals, notably that at Longleat, and in 1943 he was appointed architect for extensions to Peppard Sanatorium.

'In the flush of optimism after the war several hospitals appointed Pearson to prepare development schemes, and he did so for Preston Infirmary, King Edward VII Hospital, Ealing, Dundee Infirmary, Bromley Hospital and several others.

'The firm was appointed to design the new Charing Cross hospital group at Northwick Park, and his major work between the end of the war and his death was to plan that scheme. It is a great pity that conditions did not allow building of the project to begin before his death.'

Leonard William Elliott, A.M.I.C.E. [*A*], died on 17 February last, aged 34.

Mr. Denis Clarke Hall [*F*] and Mr. James Cubitt, M.B.E. [*A*], have jointly provided the following appreciation and account of Mr. Elliott's career:

'The sudden and tragic death of Leonard Elliott at the age of thirty-four has come as a great shock, not only to those who were associated with him in his work, but to all who had come into contact with him. It was impossible to know him, however slightly, without loving him and valuing his friendship, his integrity and his exceptional sweetness of character.

'Leonard Elliott, killed in a motor accident in the Gold Coast on 17 February, was recognised as a brilliant engineer whose broad approach and clear vision took him far beyond the field of structural engineering. He was never at a loss for a solution to a problem, and his sympathetic understanding of the architect's difficulties could only be achieved by one who was himself an architect. His versatile mind quickly grasped the implications of a problem, and at an early age he appreciated that the work of an engineer could not be divorced from that of the architect; he himself became a civil as well as a structural engineer, and was also a practising architect.

'Leonard Elliott was born in Canning Town, London, in 1918, and at the age of eleven gained a scholarship from the Star Lane

Elementary School to the Russell Secondary School, where he won a scholarship in art. He left school at 16 to earn his living. He was almost entirely self-taught, and studying day and night from textbooks he qualified in the space of three years as A.R.I.B.A., A.M.I.C.E., and A.M.I.Struct.E. He worked for the London Electricity Board, the L.C.C. and the Finsbury Borough Council, and then moved to the Admiralty, working on "D-day" installations. After this he went to the Ministry of Works, working on temporary housing schemes. In 1946 he worked in association with Denis Clarke Hall [*F*], mainly on the design and structure of schools, and in 1950, with just pride, he started his own practice. Since then he had worked with his previous associates and such distinguished architectural firms as Messrs. Easton and Robertson. A great deal of his latest work was on large commissions with James Cubitt, Scott and Partners in the Gold Coast, where he died. Of all those who knew him and worked with him it can be said that his Gold Coast associates appreciate most keenly the loss of a brilliant colleague and most lovable friend.

'In his spare time he taught himself the violin and 'cello, and played in concerts of chamber music and with a leading London orchestra.'

Mr. Elliott was R.I.B.A. Alfred Bossom Research Fellow 1950, and was an Examiner and the representative of the Royal Institute on the following Committees: Codes of Practice drafting Sub-Committees on 'Pre-stressed Concrete' and on 'Factory-made Precast Reinforced Concrete Components': B.S.I. Technical Committees B/20 'Use of Structural Steel in Building' and I.S.E./12 'Steel for Bridges and General Building Construction.' He had also served on the Architectural Science Board, A.S.B. Study Group No. 2, 'Building Techniques', A.S.B. Study Group No. 4, 'Building Economics' and as Chairman of the A.S.B. Lectures Committee.

Alfred Hugh Mottram, F.S.A. (Scot.) [*F*], past President of the Edinburgh Architectural Association, died on 12 March, aged 67.

Mr. Mottram, who was born in Norwich, was educated privately there and at Lausanne, Switzerland. He was articled to the late Sir Raymond Unwin [*F*], and later became his assistant on Hampstead Garden Suburb. In 1912 Mr. Mottram started his own practice. He was for three years in South Wales, then in 1915 went to Scotland as architect and town planner of Rosyth Garden City, Scotland. He was also responsible for numerous housing schemes in Glasgow and the west of Central Scotland and for Dundee, Edinburgh and other Scottish burghs; for banks for the Clydesdale and North of Scotland Bank; for brewery and public-house work for Messrs. Thomas Usher, Edinburgh, and others; and for private housing, commercial and industrial work in great variety. He was also planning consultant to the royal burghs of Forfar and Jedburgh and was engaged with the late Sir Frank Mears [*F*] on planning surveys for the county of Peebles. In 1947 he took into partnership his son, Mr. James A. H. Mottram, A.M.T.P.I. [*A*], by whom his practice is being continued.

Mr. Mottram was one of the first architects of the Scottish Special Housing Association. In addition to his traditional housing, he was known as a pioneer in steel houses and no-fines concrete houses between the two wars. He illustrated *Town Planning in Practice*, by R. Unwin, and other architectural works.

Besides being a past President of the Edinburgh Architectural Association and representing that body on the Allied Societies Conference, Mr. Mottram had served on the Council as a representative of Allied Societies in Scotland.

He was the younger brother of Mr. R. H. Mottram, the author.

Thomas Henry Lyon. Mr. H. C. Hughes [*F*] writes: 'Thomas Henry Lyon, who was for some years a member of the R.I.B.A., died on 25 January at his home at Ilsington, South Devon, at the age of 83. He will be remembered vividly and with affection by his many friends and pupils.

'Before the first Great War he was working in Kensington in a small group of true artists who owed much to Voysey and refused to accept the canons of Edwardian styles. There was little enough work for anyone who was so individual an artist: (he tore up the plans of his largest house because the client would not have leaded panes, and that day his dinner was only a penny bar of chocolate!) But at the family home at Ilsington Lyon was able to build a series of small lovely grey houses. At Ilsington, too, near the church, he did some work in the local tradition of harled rubble, but with that individuality which was always to distinguish his restorations.

'A man of deep religious feeling, his great opportunity came when a group of young dons determined to reawaken Sidney Sussex College, Cambridge, and make it a centre of Anglo-Catholic life in the university. His plan for doubling the length of the rather dingy room that was the chapel and turning it into a dream of marble and oak and plaster was accepted. The chapel became what he had dreamt it, a poem of devotion. Two other lovely chapels are King's Chapel and in Little St. Mary's Church.

'The revival of university life in Cambridge after the first Great War was his time of most intense activity and influence. Besides a number of renovations (such as the Old Court of Corpus and the conversion of the Great Barn in the Monastery of Ely into a gymnasium for the King's School), decorations (such as the surprising Combination Room at Corpus: Corpus had honoured its architect by giving him rooms in college) he designed with infinite care war memorials for Trinity, King's, Sidney and Pembroke and a churchyard cross outside St. Andrew's.

'Actual university buildings did not fulfil his ambitions, though he built a new and dignified block for Sidney, a library for Selwyn and a hostel for Peterhouse which makes a worthy neighbour to the Early Georgian Master's Lodge; but Cambridge between the wars wanted something more florid and more derivative to show its now impoverished students the pleasures of a former academic life. He was, however, the author of two fine churches, both tall brick buildings, plastered and vaulted internally in plaster, one at Cambridge, one at Adelaide in Australia.

'The University School of Architecture was young and half-formed: Lyon was given in 1921 the unusual position of Director of Design which he held till his retirement in 1936, so he was able to pass on to his pupils his own intense preoccupation with the nobility of art, and his insistence on endless self-criticism (he would never allow elaborately finished drawings, for he said a design was never final till it was carried out). At the same time he led his pupils to follow their own inclinations in design. He gave also a series of public lectures on 'The Attribute Proper to Art—Pure Art Value', published by Selwyn & Blount, which made a stir in circles untouched by Roger Fry: but it was the wit and eloquence of his conversation, the reality of his comradeship that made the most lasting impression.'

Reginald Francis Joseph Fairlie, R.S.A., LL.D. [*F*], died on 27 October 1952, aged 69.

Dr. Fairlie trained in the office of the late Sir Robert Lorimer, A.R.A. [*F*], and after a period of study in Italy started in personal practice in Edinburgh in 1908. He was chiefly associated with church architecture, his best known work in this field being his design for the Abbey Church at Fort Augustus and his restoration of the Norman church at Leuchars and the mediaeval University Chapel at St. Andrew's. He was also the designer of the National Library of Scotland. Also among his work were a number of war memorials, of private houses and of a housing scheme (Northfield, Piersfield). During the first world war he served in France with the Royal Engineers. He was a Royal Scottish Academician and a member of the Ancient Monuments Board and the Royal Fine Art Commission for Scotland. He was a Hon. LL.D. of St. Andrew's University.

In 1950 Dr. Fairlie took into partnership Major Charles William Gray, F.R.I.A.S. [*L*], and Mr. Alexander Ritchie Conlon, A.R.I.A.S., and they carry on the practice. Major Gray writes the following appreciation of Dr. Fairlie:

'Architecture has suffered an irreparable loss in the passing of Reginald Fairlie. Dr. Fairlie belonged to that delightful part of the Kingdom of Fife of which Auchtermuchty is the centre. He was educated at the Oratory School, Birmingham, and received his early training in the office of Sir Robert Lorimer. A story is often related that Sir Robert told him he would never make an architect, because he was too lazy. Considering that his life's work was interrupted by two world wars, it is nothing short of amazing that Fairlie accomplished what he did. As one who has been in his office with one or two breaks since 1923, and looking back down the years, I am astonished at the quantity of work that was produced in that office with so few assistants. The Doctor never hurried or bustled. Very few people ever saw him work. It was because of his extraordinary serenity that unkind tongues often called him a dilettante. It is necessary only to list some of the numerous churches and mansion houses in Scotland that sprang from his creative brain to refute this accusation.

'The profession knows what Fairlie produced, but not everybody knows, or has experienced, the depths of his kindness and understanding. As a master he never taught. He just breathed inspiration. Nothing seemed to be difficult to him. Churches were born during the night. As a draughtsman he was unique. The way he was able to create a chef-d'œuvre with the minimum of lines was uncanny. His free-hand sketching, especially in heraldic work and animals, was masterly.

'The extraordinary thing about Fairlie was that he never had any academic training. It was because architecture was so natural to him that he always favoured the old-fashioned method of architectural education by apprenticeship rather than the academical. The letters after his name were numerous, yet he never passed an examination. This was always a joke with him.

'It is not generally known, because he never advertised any of his virtues, that Dr. Fairlie was a deeply religious man. It may seem perhaps paradoxical, but he lived the life of a hermit yet was greatly sought after by many important aesthetic bodies such as the Fine Arts Commission, the National Trust, the Royal Scottish Academy, the Governors of the College of Art, and so on.

'His knowledge, not only of his profession but of all the allied arts and of the history of his country, was profound. He was a great

raconteur and his wealth of stories of Scottish, English or Irish folk-lore, which he used to tell in perfect dialect, was amazing.

'Scottish architecture has lost a great master, but unlike so many other great men he will go down to posterity as one of the kindest and gentlest of men. Like our late King, he will always be known as a "good man".'

William Benjamin Rolfe [*L*] died on 18 July 1952, aged 85. The following account of his career is sent by his partner, Mr. A. Crozier-Cole [*A*]:

'William Benjamin Rolfe had practised from 1 Belmont, Bath, all his professional life, a span of 67 years. He was articled in 1885 to the late W. J. Willcox, then County Surveyor of Somerset, and remained with him as Chief Assistant until the death of Mr. Willcox in 1928. He then succeeded to the practice and continued it first in partnership with Gilbert E. Peto and latterly with Alan Crozier-Cole [*A*].

'From 1910 to 1947 he was Surveyor to the Trustees of the Bath Municipal Charities, an office which he endowed with qualities of understanding and practical skill, as exemplified in two at least of his many works, the skilful transformation of the interior of St. John's Hospital, and in Jocelin House—one of the earliest "horizontal conversions"—with the prototype of the plan now recognised as most suitable for adapting Georgian houses to modern needs. His advice was constantly sought locally, and although his lot was cast in a Georgian city, his own preference was for the Gothic tradition.

'This kindly architect will long be remembered by his friends and pupils.'

George Harvey [*Retd. A*] died on 1 January 1953, aged 92.

Mr. Harvey studied architecture at the Royal Academy Schools, to which he was admitted in 1885, and with Mr. Edward Vigers [*F*], of Parliament Street, Westminster. Between 1890 and 1901 he was in the Architect's Department, London County Council. In 1901 he went into private practice, which he conducted with a Mr. Potter in Sevenoaks, Kent, and in Bedford Row, London. He designed blocks of flats in Marylebone; business premises in Marylebone, South Kensington, Finchley, Fulham, Maida Vale and Holloway; a printing works in Westminster; private houses in Kent, Essex and Berkshire; the Manse, Stansted, Essex; Wesleyan Sunday schools at Sevenoaks; decoration and additions to churches at Stansted, Essex, and Sevenoaks, Kent; and various elementary schools.

William Hall, A.M.T.P.I. [*L*], Chairman of the Halifax Branch of the West Yorkshire Society of Architects, died on 9 October 1952, aged 70.

Mr. Hall trained in the office of his father, Mr. Medley Hall, and practised throughout his career in Halifax. His work consisted chiefly of factories and houses. He was a member of the Committee of the Halifax Branch of the West Yorkshire Society of Architects from 1935 to 1948, when he was elected Chairman, which office he held until the time of his death. His practice has been taken over by Mr. G. R. Oddy [*L*].

Arthur Latimer Dartnell [*L*] died on 1 January 1953, aged 80.

Mr. Dartnell served his articles with Mr. Gough, of Bank Chambers, North End, Croydon, and practised in that neighbourhood, starting in 1902, until 1912. He then moved to the West Malling district of Kent and continued to practise there until a year or so before his death. In Kent he specially interested himself in the planning of oast-houses of modern design. Mr. Dartnell was a valuer to the War Department in the 1914–18 war and an assessor for the War Damage Commission in the war of 1939–45.

Herbert James Cook [*Retd. A*] died on 7 January 1953, aged 66.

Mr. Cook had been Chief Architect to the County Borough of Gateshead for 23 years, but had been absent for a year owing to ill health.

Mr. Cook was born in Sunderland and was articled to Messrs. Henderson & Hall. He served for 14 years with Durham County Council, then in the Colonial Service in Nigeria before going to Gateshead.

Besides the several thousands of houses for which he was responsible in Gateshead his work there included the Queen Elizabeth hospital, Shipcote Baths, extensions to Stannington mental hospital, Joicey Road open-air schools and new schools at Lobley Hill.

Frederick James Lucas [*L*] died on 19 November 1952, aged 72.

Mr. Lucas, who trained in the offices of Messrs. Colson, Farrow and Nisbett of Southampton, joined the staff of the London County Council in 1902 and carried out extensive housing schemes for them, including the Old Oak Estate. In 1909 he was the first prize winner in the BUILDER competition for the façade of a club in ferro-concrete, and his perspective of his design was hung in the Royal Academy in that year.

In 1931 Mr. Lucas joined in partnership with the late Mr. Thomas Thurlow and, later, with Mr. Eric Janes [*A*], practising in High Wycombe, Buckinghamshire, where he continued to work during the rest of his career. Among his works are Mill End Road and Hatters Lane secondary schools, the Middleton Park, Bicester, war emergency hospital, additions to High Wycombe war memorial hospital and extensive industrial work.

Mr. Lucas served in France in the first world war with the West Riding (Duke of Wellington's) Regiment, attaining the rank of Captain.

His practice is being continued by his partner, Mr. Eric Janes [*A*].

George Douglas Hamilton [*F*] died on 21 November 1952, aged 83.

Mr. Hamilton was educated at Sevenoaks School, Kent, and then served his articles with his father, Mr. John Hamilton, later becoming a partner and carrying on the practice after his father's death. Mr. Hamilton specialised in factory work, and built a number of industrial premises, including buildings for Messrs. Reeves & Sons Ltd., artists' material manufacturers, and Messrs. Sutton & Co., carriers, principally in the City and East End of London. He also designed the parish hall and vicarage of St. John's, Walthamstow, where he was for many years churchwarden and vicar's warden.

As a young man Mr. Hamilton was a keen Territorial, and was from 1906 to 1912 with the London Scottish. When he resigned he was Company Sergeant Major. During the first world war he was a keen Volunteer Reservist and was Captain of his Company.

Mr. Hamilton's son, Mr. M. J. Hamilton [*L*], carries on the practice.

Leslie Douglas Coombs [*A*], of Dunedin, New Zealand, died on 18 August 1952, aged 67.

Mr. Coombs trained in offices both in Dunedin and London, but practised throughout his career in Dunedin. He was the city's Building Surveyor from 1932 to 1941 and designed the Council's housing scheme. He was previously in private practice and designed various dairy factories and war memorials, Southland Girls' High School and (in partnership with Mr. J. H. White in the twenties) the Methodist theological college, Auckland.

Mr. Coombs was a Fellow of the New Zealand Institute of Architects and a member of its Council on many occasions. He was a member of the Board of Portobello Fish Hatchery and Marine Biological Station from 1932 to 1951. Besides taking a keen interest in golf, chess, bowling and other sports he was an enthusiastic microscopist, with a special interest in diatoms.

Thomas Walker [*Retd. F*] died on 4 January 1953, aged 71.

Mr. Walker was successively Assistant Architect to the Derbyshire County Council, Education Architect, Northumberland, and the first County Architect for Wiltshire. He held this post from 1921 until his retirement in 1947. In the course of it he was responsible for many major projects, including schools and police stations in many parts of the county, the Pewsey Colony for mental defectives, Trowbridge library and the Corsham clinic, and numerous hospital additions and extensions.

Mr. Walker was a keen golfer and a Freemason, being a member of the Devizes Lodge of Fidelity.

Cyril Wontner Smith [*F*] died on 2 December 1952, aged 75.

Mr. Wontner Smith served his articles with the late A. Morris Butler [*F*], and was later assistant to Arnold Mitchell [*F*], Sir Aston Webb [*F*] and Sir Arthur Blomfield [*F*]. In 1900 he became an Associate of the Royal Institute, and in 1902 was Pugin Student. He visited France, Italy, Belgium and Holland. In 1903 he began practice on his own account in London. From 1908 to 1920 he was surveyor to the archdeaconry of Oxford and from 1912 until 1947 surveyor to the diocese of London. He was elected Fellow in 1913.

Perhaps Mr. Wontner Smith's best-known work is the central building and forecourt of the headquarters of the British Medical Association in Tavistock Square. (He succeeded Sir Edwin Lutyens as architect to the Association.) He also did much restoration work to many churches in London which were damaged in the recent war, including the parish church of St. Dunstan with All Saints, Stepney, which he completed just before his death. It was on his advice and recommendation that the tower of St. John's, Wapping, built in 1756, was saved from demolition.

He also designed many country houses and gardens and restored and modernised Brocket Hall, Hertfordshire, for the late Lord Brocket. He also designed a housing scheme for the Hampstead Borough Council.

Mr. Wontner Smith was a member of the Art and Literature Standing Committees of the R.I.B.A. and served as an examiner. He was a past Vice-President and Honorary Secretary of the Architectural Association. A draughtsman of distinction, he had many drawings published and accepted for exhibition by the Royal Academy.

Gerald de Courcy Fraser [*F*] died on 23 November 1952, aged 80.

Mr. Fraser practised throughout his life in Liverpool, where he had been articled to Mr. Walter William Thomas. He started in personal practice in 1905. In 1949 he took into partnership Mr. K. W. Gearey [*A*] and Mr. M. G. Fraser [*A*], who now carry on the practice.

Mr. Fraser's name is associated with a long list of buildings—Litherland Town Hall and the dental hospital, Liverpool; departmental stores in a number of cities, including Lewis' Ltd. in Liverpool, Glasgow, Birmingham and Leicester; various office buildings in Liverpool, including the Premiere buildings; three Liverpool cinemas—the Corona, Crosby, the Beresford and the Casino; several hotels in Chester, New Brighton and elsewhere; two boys' clubs in Liverpool—the University settlement and Harold House; housing schemes at Litherland and Aigburth; and the Littlewood's Pools' building in Liverpool.

William Williamson [*F*] died on 15 October 1952, aged 81.

Mr. Williamson served his articles with Mr. J. B. Dunn of Edinburgh. He embarked on private practice in Kirkcaldy in about 1893. He was, from about 1898 to about 1902, in partnership with Mr. J. A. R. Inglis. On Mr. Inglis's death he entered into partnership with Mr. Harry Hubbard [*A*], who today carries on the practice.

Mr. Williamson's principal works include the Kirkcaldy police buildings; various schools in Kirkcaldy; the Cameron Hospital, Fife, and the Forth Park maternity hospital, Kirkcaldy; libraries in Burntisland and Kirkcaldy; savings banks in Kirkcaldy, Burntisland and Leven; and various housing schemes and private houses.

Mr. Williamson was Dean of Guild and Provost of Kinghorn and a J.P. He served on the Council of the Royal Incorporation of Architects in Scotland.

Joseph John Wood [*A*] died on 9 November 1952, aged 72.

On leaving Bootham School in 1896 he spent three years at Leeds University (then the Yorkshire College) and then served his articles with Messrs. Bedford and Kitson, architects, of Leeds. He started his own practice in 1904, and throughout his career took no partner. His principal works were: two large blocks of flats—Grange Court and North Hill Court, Headingley, Leeds; Leeds University Working Men's Club; alterations to Meeting Houses of the Society of Friends—of which he was a member; and a number of private houses.

Mr. Wood undertook much social work—while he was at college he took a leading part in starting the Leeds University Working Men's Institute—and also much spiritual work for the Society of Friends.

John Milne [*A*] died on 19 November 1952 at the unhappily early age of 32.

Mr. Milne studied at the Aberdeen School of Architecture and served his articles with Messrs. Tawse & Allan, Aberdeen. In 1950 he took up an appointment with Aberdeen County Council, where he remained until the time of his death.

Notes from the Minutes of the Council

MEETING HELD 31 MARCH 1953

Her Majesty Queen Mary. By a unanimous resolution, the President was desired to lay before Her Majesty The Queen an expression of the Royal Institute's sympathy and condolence on the death of Her Majesty Queen Mary.

Her Royal Highness The Princess Margaret. The Council received with pleasure the acceptance by Her Royal Highness The Princess Margaret of their invitation to become an Honorary Fellow.

Appointments. (A) *British Productivity Council: Conference* 19 *March* 1953: *R.I.B.A. Representatives*. Mr. Michael Waterhouse, Past President; Mr. Robert Matthew [*A*]. (B) *British Standards Institution Building Divisional Council: R.I.B.A. Representative*. Mr. R. N. Wakelin [*F*] in place of Mr. Lister P. Rees [*A*]. (C) *National Householders' Registration Council: R.I.B.A. Representation*. Miss J. G. Ledeboer [*A*] in place of the late Mr. C. H. James [*F*]. (*Note:* The other two representatives are Mr. A. W. Kenyon [*F*] and Mr. Kenneth Peacock [*F*]).

Mr. Joseph L. Gleave, A.R.S.A. [*A*]. The congratulations of the Council were conveyed to Mr. Joseph Gleave [*A*] on his election as an Associate of the Royal Scottish Academy.

United Kingdom Committee, International Union of Architects. Arrangements have been made for Mr. M. Hartland Thomas [*F*] to give a paper on Modular Co-ordination at the Congress of the International Union of Architects to be held in Lisbon in September 1953. It was agreed to appoint Mr. Hartland Thomas to the United Kingdom Committee, I.U.A., to facilitate the co-ordination of his paper with the other matters for which the United Kingdom Committee are taking responsibility.

Amendments to Rules: The Federation of Malaya Society of Architects. Formal approval was given to amendments to Rules 7 and 21 of the Federation of Malaya Society of Architects.

The Late Mr. Ralph Deakin [*Hon. A*]**: Collection of Architectural Photographs.** The Council were informed that the late Mr. Ralph Deakin [*Hon. A*] had bequeathed his collection of architectural photographs to the Royal Institute.

Completion of Premises Fund: Donations. The following donations have been received:—Mr. Harry Barrett [*A*] (U.S.A.)—£3: Messrs. Leeb, Ritchie-Fallon & Noall [*A*/*A*/*A*] (South Africa)—2 guineas. Letters of thanks on behalf of the Council have been sent to the donors.

Amendment to British Standard 990: 1945: Metal Casement Windows and Casement Doors. The representatives appointed by the Council at their last meeting reported on a discussion held with the Director of the British Standards Institution.

The Director had confirmed his previous statement that no standard or amendment was issued without 'general consent', but in the course of discussion it was made clear that this expression did not imply unanimity or even any form of majority vote. Where there appeared to be divergence of opinion on the value of a standard it was the function of the officials of the British Standards Institution to endeavour to reconcile conflicting views and ultimately to take a decision as to whether a standard should be prepared or not. While the Royal Institute was regarded as an important representative of user interests it had no power of veto of a standard regarded as unsatisfactory.

The Council were not altogether reassured by this report and it was appreciated that the inclusion of the Royal Institute in the list of bodies participating in the preparation of standards might on occasions be misleading by indicating that the standard had the Royal Institute's full approval.

It was agreed to take note of the discussion and to watch developments, while continuing the Royal Institute's work on British Standards on the existing system.

Membership. The following members were elected:—As Honorary Associates 4: As Honorary Corresponding Member 1: As Fellows 8: As Associates 126: As Licentiates 6.

Students. Sixty-one Probationers were elected as Students.

Grants. The Council approved the following list of grants for the year 1953–1954:—British School at Rome £750, Architects' Benevolent Society £150, Architectural Association Lantern Slide Collection £100, British School of Archaeology at Athens £50, C.P.R.E. £50, Students' Visit to Rome £50, Parliamentary and Scientific Committee £26 5*s*., Association for the Preservation of Rural Scotland £10, B.S.I. £26 5*s*., R.I.B.A. Cricket Club £26 5*s*., R.I.B.A. Library Group £10, Council for the Preservation of Rural Wales £7, International Federation for Housing and Town Planning £5, British School at Rome, Faculty of Archaeology £3 3*s*., National Art Collections Fund £3 3*s*.

Resignations. The following resignations were accepted with regret:—Henry Hyams [*F*], Miss Jane Costain [*A*], Mrs. Barbara May Rogers [*A*], Henry Tribe Cover [*Retd. L*].

Obituary. The Secretary reported with regret the death of the following members:—Samuel Grant Alexander [*F*], Sidney James Edwards [*F*], Edmund Bertram Kirby [*F*], James Macgregor [*F*], Cecil Broadbent Metcalfe [*F*], Alfred Hugh Mottram [*F*], Lionel Godfrey Pearson [*F*], Hurley Robinson [*F*], Frank Reginald Gould Wills [*Retd. F*], Wilberforce Ernest Hazell [*Retd. F*], Ernest Hadden Parkes [*Retd. F*], Joseph Percy Firth [*A*], John Boyd Lawson [*A*], Ernest Batho Bailey [*L*], Walter Butler [*L*], William Ernest Dickie [*L*], Trevor John Tatham [*Retd. L*], Derek Hurry Gardner [*Student*], Hayden Floyd Hughes [*Student*], Mrs. June Hilda Frances Morrison [*Student*].

Membership Lists

ELECTION: 31 MARCH 1953

The following candidates for membership were elected on 31 March 1953.

AS HON. ASSOCIATES (4)

Ashton: Sir (Arthur) Leigh (Bolland).
Gowers: Sir Ernest Arthur, G.C.B., G.B.E., Liphook, Hants.
Gregory: Eric Craven, Ll.D.
Russell: Sydney Gordon, C.B.E., M.C., Campden, Glos.

AS HON. CORRESPONDING MEMBER (1)

Plecnik: Professor Joseph, Ljubljana, Yugoslavia.

AS FELLOWS (8)

Bazeley: Ailwyn Geoffrey, M.B.E., M.A. (Cantab), A.A.Dipl. [*A* 1933], Penzance.
Biggar: Gordon Buchanan, D.A. (Glas.) [*A* 1938], Alloa.
Brundle: Kenneth Alfred, A.A.Dipl. [*A* 1936], Singapore, Malaya.
Kelly: Richard Harrison, Dipl.Arch. (L'pool) [*A* 1932], Liverpool.
Koh: Cheng Yam, A.A.Dipl. [*A* 1934], Singapore, Malaya.

and the following Licentiates who have passed the qualifying Examination:—

Bradshaw: Donald, Liverpool.
Cubitt: Frederick William.
Pargiter: Leonard George, M.B.E.

AS ASSOCIATES (126)

Ahed: Mohamed Abdul, Dip.Arch. (Leics.), Karachi, Pakistan.
Allen: Richard, B.Arch. (Melbourne), South Yarra, Victoria, Australia.
Ashmead: Dennis Harold, Dip.Arch. (The Polytechnic).
Austin: John David Adshead, Dipl.Arch. (U.C.L.), Parkstone.
Awon: Joseph Alwin, Dip.Arch. (The Polytechnic).
Bailey: Ian Leslie, Portsmouth.
Baker: Stanley Thomas, Dip.Arch. (The Polytechnic), Guildford.
Barnes: Harry Stuart, Heywood.
Bond: Derek Owen, Norwich.
Bonnington: John Smith, B.Arch., Dip.T.P. (Dunelm), Gateshead.
Bottomley: Derek Stanley, Huddersfield.
Box: Kenneth Edward.
Braddock: Ian Baxter, D.A. (Edin.), Beverley.
Brown: Alexander Maccallum, D.A. (Edin.), Kuwait, Persian Gulf.
Brown: Robert Gellatly Rigg, D.A. (Edin.), Cupar.
Burton: Patrick John, Dip.Arch. (Birm.), Evesham.
Callow: Robert Alan, Dip.Arch. (Leics.), Coventry.
Carhart-Harris: Trevor Leslie, B.Arch. (Dunelm), Ware.
Chamberlain: Jack Desmond, Dip.Arch. (Leics.), Goodmayes.
Clifford: William Michael, Petersfield.
Cope: Ronald Morley, Dip.Arch. (Nottm.), Harlow.
Cowley: Derek Ernest, Dip.Arch. (Birm.), Worcester.
Crofts: Vernon William, Wolverhampton.
Crowther: John Burton, B.Arch. (Wales), Truro.
Daniel: Geoffrey, Dip.Arch. (Birm.), Birmingham.
Dean: Joseph Malcolm, Dipl.Arch., Dip.C.D. (L'pool), Wigan.
Del Nevo: Philip John, Dipl.Arch. (Oxford), Oxford.
Denham: Kenneth Harvey, Dip.Arch. (Birm.), Streetly.
Dove: Myles Harrison, B.A. (Sheffield), Sheffield.
Dyer: Roy Ivor, Dip.Arch. (The Polytechnic).
Eagles: Frank Ivor, Thornton Heath.
Edgar: Kenneth, Dip.Arch. (Birm.), Coventry.
Edmondson: Kenneth Hirst, Timperley.
Fisher: Fred, B.Arch. (Rand), Johannesburg, S. Africa.
French: Harold Thomas, B.Arch. (C.T.), Dar es Salaam, Tanganyika.
Fyfe: Robert Thomson, D.A. (Edin.), Cardenden.
Garside: John, B.Arch. (Dunelm), Gateshead.
Gilling: Douglas Lawrence, B.Arch. (Sydney), Sydney, N.S.W., Australia.
Greenen: Stanley Hugh, Dip.Arch. (Manchester), Newport, Isle of Wight.
Grouse: Reginald Edward, B.Arch. (Melbourne), Toorak, Victoria, Australia.
Hayton: James Donald, Newcastle upon Tyne.
Henderson: Charles Brian, D.A. (Edin.), Edinburgh.
Hibbs: John Dennis, Dip.Arch. (The Polytechnic).
Hickson: Francis Richard, B.Arch. (Dunelm), Wotton-under-Edge.
Hodson: Stanhope Corringham, Dip.Arch. (Leics.), Sheffield.
Holliday: Phillip Sutton, Dip.Arch. (The Polytechnic).
Hossack: Patrick Garden Milne, B.Arch. (L'pool), Crawley.
House: Gerald Frederick, Dipl.Arch. (Oxford), Nottingham.
Hubert: John Keith, Dip.Arch. (The Polytechnic).
Humphreys: Thomas George, Dip.Arch. (Dunelm), Sunderland.
Jespersen: Ian, Dip.Arch. (Leics.), Wigston.
Johnson: Colin Herbert, Dip.Arch. (Dunelm), Darlington.
Jones: Leslie Arthur, B.Arch. (C.T.), Port Elizabeth, S. Africa.
Jones: Lewis Thomas, B.Arch. (Dunelm), Durham.
Keiffer: Alfred Grant, B.Arch. (L'pool), Liverpool.
Kemp: William Frank, Dip.Arch. (Nottm.), Nottingham.
Kleinfeld (now Kenfield): Maurice, Ilford.
Knowles: James, B.Arch. (L'pool), Ulverston.
Kristafor: Anthony, B.Arch. (C.T.), Salisbury, Southern Rhodesia.
Laburn: James Whitton, D.A. (Dundee), Inverness.
Lanham: Douglas Henry, Dipl.Arch. (Northern Polytechnic).
Large: James Alan, Dipl.Arch. (Leeds), Barrow-in-Furness.
Lea: Clifford, Dipl.Arch. (L'pool), Lurgan.
Lemar: Peter Arthur, Gillingham.
Lilley: Thomas Leslie, Hemel Hempstead.
Little: John Albinus, Dipl.Arch. (Leeds), Littlehampton.
Lofthouse: William Redvers, Dipl.Arch. (Leeds), Leeds.
Longstaff: Jack Hughes, Dipl.Arch. (Leeds), Kettering.
McCann: Thomas Keith, Dip.Arch. (Manchester), Manchester.
McKillop: Norman Milne, D.A. (Edin.), Inverness.
Meikle: Alan, Dip.Arch. (Birm.), Pershore.
Monk: Leon Arthur Ernest, A.A.Dipl., Madras, India.
Morrocco: Valentino, Dip.Arch. (Abdn.), Edinburgh.
Mort: Basil James, Dip.Arch. (Sheffield), Sheffield.
Mowbray: Philip George, Preston.
Myers: Donald Temple, Dip.Arch. (Dunelm), Crook.
Naunton: Maurice William, Dip.Arch. (Sheffield), Tiptree.
Parker: Ernest Kenneth, Dip.Arch. (Birm.), Stafford.
Parsons: John Winfield, Dip.Arch. (Birm.), Worthing.
Pearson: (Miss) Anne Clemence, B.Arch. (N.U.I. Dublin), Crosshaven.
Pool: Victor Henry, Bridlington.
Pradhan: Balkrishna Mukundrao, Bombay, India.
Raine: Ian Philip, Dip.Arch., Dip.T.P. (Dunelm), Newcastle upon Tyne.
Ramsay: David Douglas, B.Arch. (Dunelm), Sunderland.
Rayner: Ronald Montague, Dip.Arch. (The Polytechnic).
Reeves: Leslie Alfred, Dip.Arch. (Manchester), Cannock.
Regan: John Derrick, Dipl.Arch. (Leeds), Wakefield.
Ridley: Thomas Joseph, B.A. (Arch.) (Sheffield), Chelmsford.
Robinson: Christopher Douglas, B.A.(Arch.) (Lond.), Chelmsford.
Robinson: David William, Dip.Arch. (Auck., N.Z.), Hawera, New Zealand.
Robson: Brian Douglas, B.Arch., Dip.T.P. (Dunelm), Bexleyheath.
Rock: David Annison, B.Arch. (Dunelm).
Rogers: John Granville, Dip.Arch. (Birm.), Shrewsbury.
Ryan: Eric Nowell, Dip.Arch. (Sheffield), Sheffield.
Sadler: Raymond Archie, Ottawa, Ontario, Canada.
Sanford: Anthony Pearson, M.C., M.A. (Cantab.).
Saunders: Arthur Edward Ford, Dip.Arch. (The Polytechnic), Woking.
Scott: Andrew Cruickshank, B.A.(Arch.) (Manchester), Manchester.
Scott: David Christopher, Norwich.
Seward: John Richard Gowing, Dip.Arch. (Manchester), Stockport.
Sexton: Rowland Basil, D.F.C. (U.S.A.), B.A.(Arch.) (Manchester), Stockport.
Sharma: Dev. Prakash, B.A. (Punjab), A.M.T.P.I., Bradford.
Simpson: Arthur, Dipl.Arch. (Leeds), Keighley.
Smith: Kenneth Horwood, Pontefract.
Solarski: Antoni.
Souter: Harry John, Dip.Arch. (Manchester), Stockport.
Stagg: Peter Clayton, Dipl.Arch. (U.C.L.), Bordon.
Stephenson: Roy Herbert, Dip.Arch., Dip.T.P. (Dunelm), North Shields.
Stone: Gilbert Rodney, Dip.Arch. (The Polytechnic).
Sullivan: John Stanley, Dip.Arch., Dip.T.P. (Dunelm), Newcastle upon Tyne.
Sylvester-Booth: Charles Vernon, A.S.T.C., Sydney, N.S.W., Australia.
Thomson: Archibald MacDonald, D.A. (Edin.), Belfast.
Urpeth: (Miss) Joan, B.Arch. (Dunelm), Bedlington.
van Niekerk: Cornelius Willem, B.Arch. (Rand), Kimberley, S. Africa.
Ward: John Hartley, Dip.Arch. (The Polytechnic), Sandy.
Watson: Newton Frank, B.Arch. (Dunelm), Stevenage.
Watson: Ronald Ingleton, D.A. (Edin.), Edinburgh.
Welton: Robert Arthur, Dip.Arch. (Cardiff), Cardiff.
Welton: Roy Michael, Dip.Arch. (The Polytechnic), Westcliff-on-Sea.
Whitefield: John Frederick, D.A. (Edin.), Bangor, Co. Down.
Whitehurst: Kenneth William, Dip.Arch. (Nottm.), Nottingham.
Whitney: John Charles, Dip.Arch. (Dunelm), Middlesbrough.
Whittlestone: Brian, Dipl.Arch. (Leeds), Leeds.
Wilson: Hubert Frank, Willingdon.
Woodhead: Dudley Kenneth, Dip.Arch. (Manchester), Sutton.
Young: Robert Hutton, D.A. (Glas.), Glasgow.

AS LICENTIATES (6)

Barraud: Ronald, Nottingham.
Brown: Thomas Leslie, Khartoum, Sudan.
Dowding: Edward Arthur.
Hollingsworth: Harold James, Hull.
McCutcheon: John Denis, Coleraine.
Tucker: Richard John, Bushey.

Members' Column

This column is reserved for notices of changes of address, partnership and partnerships vacant or wanted, practices for sale or wanted, office accommodation, and personal notices other than of posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

APPOINTMENTS

Mr. C. H. W. Allport [*A*] has been appointed District Architect, The Housing Commission of New South Wales, with headquarters at Orange, and his private address is now 52 Brunswick Street, Glenroi Heights, Orange, New South Wales, Australia.

Mr. L. Howarth [*A*] has taken up the appointment of Senior Architect in the Production Department of the Scottish Division of the National Coal Board, and has removed to 9 Craigmount Grove, Edinburgh, 12.

Mr. Guy S. Melland [*A*] has resigned from his appointment as Senior Architect to the Nairobi City Council to join the staff of Messrs. Cobb, Archer and Scammell [*F*/*F*], P.O. Box 58, Nairobi, as Chief Assistant. His private address is, as before, P.O. Box 2319, Nairobi, Kenya Colony.

Mr. Ronald J. Ovenden [*A*] has discontinued his association with Vincent Burr and Partners, 85 Gower Street, W.C.1, and has been appointed Staff Architect to the Phillips Furnishing Co. Ltd. His headquarters will be at their London office, 22 South Audley Street, W.1, where he will be pleased to receive trade catalogues, etc.

Mr. Eric Taylor [*A*] has left the service of the City Council of Singapore (Department of the City Architect) and has taken up the appointment of Municipal Architect, Kuala Lumpur, Federation of Malaya.

PRACTICES AND PARTNERSHIPS

The partnership of **Arcon** has been dissolved. The late partners will practise separately at the following addresses:—**Mr. Rodney Thomas** [*A*] at 5 Seymour Walk, S.W.10. **Mr. A. M. Gear** [*A*] at 81 Piccadilly, W.1. Both Mr. Gear and Mr. Thomas will continue to act as consultants to the Arcon Group.

Mr. Josias C. Beare [*Retd. A*] has retired from the firm of **Beare and Croydon,** 42 Devon Square, Newton Abbot, Devon. The practice will be continued under the present name and at the same address by the remaining partner, **Mr. Frederick W. T. Croydon** [*A*] who has been associated with the firm for many years.

Mr. Kenneth M. Carver, D.F.C. [*A*], has entered into partnership with **Mr. H. P. Liberty,** and they will practise under the style of **H. P. Liberty and Partner,** at 33/34 Weston Chambers, Weston Road, Southend-on-Sea.

Mr. A. E. Crocker [*A*] has terminated his employment with the Ndola Municipal Council and has commenced private practice at P.O. Box 641, Berkeley Chambers, Cecil Avenue, Ndola, where he will be pleased to receive trade catalogues, etc.

Mr. William Church de la Porte [*L*] has taken into associate partnership **Mr. Harold J. Ellery** [*A*]. The firm will continue to practise under the style of **Porte and Partners** from their present address, 16/17 Devonshire Square, E.C.2.

Mr. H. M. R. Drury [*F*] has taken **Mr. P. B. H. Gundry** [*A*] into partnership. The firm will practise under the style of **Drury and Gundry** at the present address, The Church House, The Close, Exeter. A branch office has also been opened at Furzeleigh, Upper Hermosa Road, Teignmouth.

The practice of the late Mr. E. Donald Haigh, A.M.T.P.I. [*A*], at Lowther House, Lowther Street, Kendal, is being carried on under the style of **E. Donald Haigh,** at the same address by **Mrs. Joan M. Haigh** and **Mr. E. M. Bottomley,** B.Arch.(Lvpl.) [*A*].

Mr. Graeme I. C. Highet [*F*] has opened an office at Norfolk House, 9 Quarry Street, Guildford (Guildford 67626), where he will be pleased to receive trade catalogues, etc.

Mr. Stuart C. Lawson [*L*] has established his head office at Barclay's Bank Chambers, 12 Hart Street, Henley-on-Thames, where he will be glad to receive trade catalogues, etc.

Mr. Eric Lyons [*F*] and **Mr. G. Paulson Townsend** [*L*] have terminated their partnership at Mill House, Bridge Road, Hampton Court. Mr. Lyons will continue the practice at Hampton Court and also at 141 Borough High Street, London Bridge, S.E.1.

Mr. Peter L. Oldfield, A.M.T.P.I. [*A*] has now commenced practice at 24 Salisbury Street, Salisbury, Southern Rhodesia, where he will be pleased to receive trade catalogues, etc.

Messrs. Radford, Howells and Partners [*A*/*A*] have opened a branch office at P.O. Box 97, Tororo, Uganda, and will be pleased to receive trade catalogues, etc.

Mr. Donald Wagg [*A*] is now associated with **Mr. Henry Whittaker** and the style of the firm will be **Whittaker and Wagg.** They will practise from Castle House, 635 Fort Street, Victoria, B.C., Canada.

Mr. J. G. Warwick [*F*] has taken into partnership **Mr. Keith Ellis** [*A*]. They will practise under the style of **Warwick and Ellis** at 43a Priestgate, Peterborough (Peterborough 2334).

Mr. Donald P. Whitehorn [*A*] has relinquished his appointment as Architect, South East Scotland Electricity Board, and has entered into partnership with **Mr. W. George Brown** [*A*]. The style and address of the firm is **Whitehorn and Brown,** 11 Rutland Street, Edinburgh, 1 (Fountainbridge 4026), where they will be pleased to receive trade catalogues, etc.

Consequent on the retirement owing to ill health of **Mr. J. W. Wilkinson,** his partner **Mr. E. Smith** [*L*] has taken into partnership as from 1 January 1953 his assistant **Mr. Eric Brittlebank** [*A*]. The name of the firm will now be **Wilkinson, Smith and Brittlebank,** and the address Martins Bank Chambers, Westborough, Scarborough, remains unchanged.

CHANGES OF ADDRESS

Messrs. A. Ewart Aston [*L*] and **William E. Marsden** [*L*] have removed their offices to Ebury House, 1a Blenheim Road, Minehead, Somerset.

Mr. John J. Bevan [*A*] has changed his address to 1 New Court, Carey Street, Lincoln's Inn, W.C.2 (HOLborn 7344).

Mr. D. A. Blakesley [*A*] has removed to 178 London Road, Leicester, where he will be pleased to receive trade catalogues, etc.

Mr. James W. Crisp [*A*] has removed to 1820 Spruce Street, Berkeley 9, California, U.S.A.

Messrs. Hare and Pert [*A*/*A*] have changed their address from 1 Museum Street, Ipswich, to 29 Elm Street, Ipswich, where they will be pleased to receive trade catalogues, etc.

Mr. M. J. Hislop [*A*] has removed to 41b Clanricarde Gardens, W.2.

Mr. W. F. Howard [*F*] has removed his office to 103 Old Brompton Road, S.W.7 (KENsington 8759).

Mr. O. J. Howell [*A*] has removed to c/o Uganda Development Corporation Ltd., P.O. Box 442, Kampala, Uganda, and will be pleased to receive trade catalogues, etc.

Mr. Arthur J. May [*F*] has changed his address and is now at 'Axview', Seaton Down Hill, Seaton, Devon.

Mr. Douglas W. Miles [*A*] has removed to 46 Pennsylvania Road, Exeter.

Mr. J. Fred Pye [*L*] has removed to 4 Abbey Walk, Grimsby, Lincs. (Grimsby 3930).

Mr. R. Satchwell [*L*] has removed to 83a Edmund Street, Birmingham, 3. His telephone number (Central 2305) remains unchanged.

PRACTICES AND PARTNERSHIPS WANTED AND AVAILABLE

Associate (47), general experience, suitable personality, some financial resources, seeks partnership in provincial practice, South of England—preferably Winchester/Southampton area. Box 19, c/o Secretary, R.I.B.A.

Associate with thorough experience of architectural practice and procedure seeks partnership or position leading thereto. Capital available. Box 23, c/o Secretary, R.I.B.A.

Fellow, with London office, in practice for 15 years, having considerable experience in the design and erection of factories, housing, etc., in England and the Middle East, seeks partnership or position leading thereto, with London firm with contemporary outlook in design. Box 24, c/o Secretary, R.I.B.A.

Fellow, A.M.T.P.I., with experience of contemporary, industrial and housing schemes, seeks partnership or would consider buying practice. South of England preferred but not essential. Box 27, c/o Secretary, R.I.B.A.

WANTED AND FOR SALE

Wanted. Two D.E. plan chests, 'Phone AMBassador 3740 or write Box 25, c/o Secretary, R.I.B.A.

For Sale. A quantity of office equipment, including drawing boards, tee squares, instruments, etc. List on application. Box 26, c/o Secretary, R.I.B.A.

The Royal Institute of British Architects, as a body, is not responsible for statements made or opinions expressed in the JOURNAL.

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